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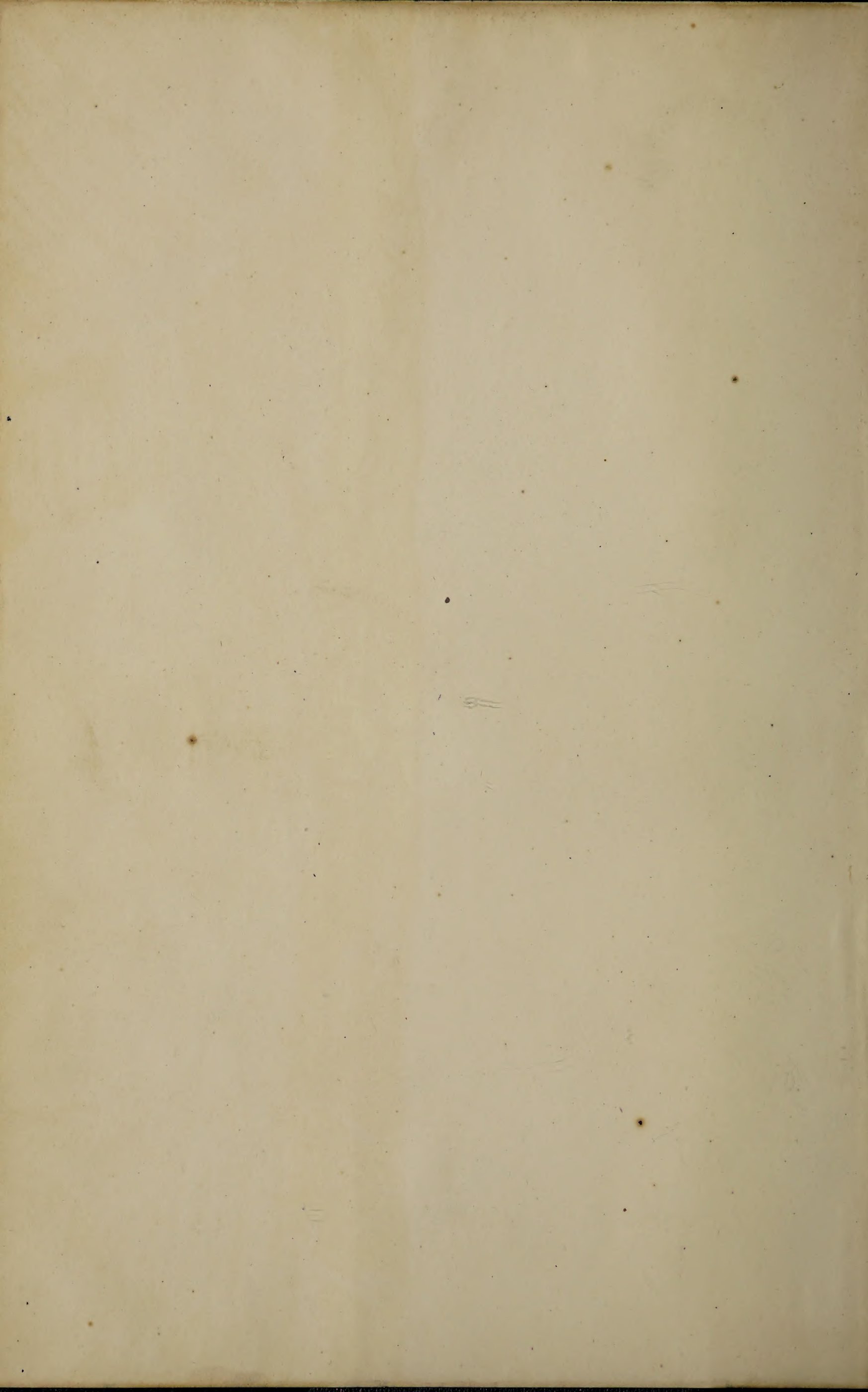














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REPORT

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1872

OF

THE COMMISSIONER

OF

THE GENERAL LAND OFFICE

TO THE

SECRETARY OF THE INTERIOR

FOR

THE YEAR 1872.

**BUREAU OF LAND MANAGEMENT**

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THE LAND AND OTTAWA

TO THE MEMBERS OF THE LAND AND OTTAWA

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# REPORT

## OF THE

### COMMISSIONER OF THE GENERAL LAND OFFICE.

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.

SIR: In accordance with a resolution adopted on the 28th of February, 1855, by the Senate of the United States, I have the honor to submit the following as an abstract of my annual report for the fiscal year ending June 30, 1872, viz:

	Acres.
Disposal of public lands by ordinary cash sales.....	1, 370, 320. 15
Military bounty land warrant locations, under acts of 1847, 1850, 1852, and 1855.....	389, 460. 00
Homestead entries, under act of 1862, and amendments.....	4, 671, 332. 14
Agricultural college scrip locations.....	693, 613. 37
Certified to railroads.....	3, 554, 887. 58
Certified for wagon roads.....	465, 347. 21
Lands approved to States as swamp.....	714, 255. 19
Sioux Indian scrip locations.....	5, 760. 00
Total.....	11, 864, 975. 64
Sales of previous year.....	10, 765, 705. 39
Increased disposal.....	1, 099, 270. 25
Cash receipts under various heads.....	\$3, 218, 100. 00
	Acres.
Total area of the land States and Territories.....	1, 834, 993, 400
Surveyed within the last fiscal year.....	29, 450, 939
Previously surveyed.....	553, 913, 841
Total surveyed to June 30, 1872.....	583, 364, 780
Leaving yet to be surveyed.....	1, 251, 633, 620

*List of papers composing the annual report of the Commissioner of the General Land Office.*

1. Surveys of public lands, showing the progress made at the close of the last fiscal year, and giving a list of United States surveyors general and the districts under their immediate supervision; also a list of the United States district land offices.

2. Synopsis of the surveying service in the seventeen surveying districts, including the surveys of Indian reservations, State and territorial boundaries, and of private land claims.

3. Of Pre-emption laws and rulings under the same, recommending a



consolidation of the principal features of the pre-emption and homestead laws into one statute.

4. Town sites.
5. Homestead laws; operations and instructions under the same.
6. Graduated lands, recommending further legislation by which suspended cases may be disposed of.
7. Public sales of timber lands, under the proclamation of the President.
8. Timber depredations, showing action of this office to prevent the same.
9. Swamp and overflowed lands, accompanied with instructions of March 18, 1872, issued under the act of March 3, 1855, and amendment.
10. Sale of morass lands on the Little Calumet River, in Indiana.
11. Useless military reservations ordered to be brought into market under act of February 24, 1871.
12. Educational land bounty, showing operations under different acts granting lands for educational purposes.
13. Railroads, progress of transcontinental lines and of roads in States and Territories to which subsidies in land have been granted.
14. Mining statutes; regulations, rulings, and decisions under the same.
15. Private land claims; recommending further legislation to provide for the adjustment of all claims emanating from foreign governments, and advising repeal of section 3 of act of May 30, 1862, requiring claimants to pay for the survey of their ranchos.
16. Tree culture, suggesting legislation to encourage tree planting.
17. Reports of surveyors general, numbered from A to Q.

*Tabular statements accompanying Commissioner's annual report.*

No. 1. Tabular statement showing the number of acres of public lands surveyed in the States and Territories at the close of the fiscal year ending June 30, 1872; also the total area of the public lands remaining unsurveyed at that date.

No. 2. Statement of public lands sold; of cash and bounty land scrip received therefor; number of acres entered under the homestead law of May 20, 1862; of commissions received under the sixth section of said act; also, land located with scrip under the agricultural college and mechanic act of July 2, 1862, and commissions received by registers and receivers on the value thereof; and statement of incidental expenses thereon in the first half of the fiscal year commencing July 1, 1871, and ending June 30, 1872.

No. 3. Statement showing like particulars for the second half of the fiscal year ending June 30, 1872.

No. 4. Summary for the fiscal year ending June 30, 1872, showing the number of acres disposed of for cash; for bounty land scrip; by entry under the homestead laws of May 20, 1862, and June 21, 1866, with aggregate \$10 homestead payments; homestead commissions; also, locations with agricultural college scrip under act of July 2, 1862.

No. 5. Statement showing the quantity of swamp lands selected for the several States under acts of Congress approved March 2, 1849, September 28, 1850, and March 12, 1860, to September 30, 1872.

No. 6. Statement exhibiting the quantity of swamp land approved to the several States under acts named in table No. 5 to September 30, 1872.

No. 7. Statement exhibiting the quantity of swamp land patented to the several States under acts approved September 28, 1850, and March



12, 1860; also, the quantity certified to the State of Louisiana under act approved March 2, 1849.

No. 8. Statement showing the State selections under the internal improvement grant of September 4, 1841, to the 30th June, 1872.

No. 9. Exhibit of bounty land warrant business under acts of 1847, 1850, 1852, and 1855, showing the issues and locations from the commencement of operations under said acts to June 30, 1872.

No. 10. Statement showing the selections made by certain States of lands within their own limits under the agricultural college and mechanic act of July 2, 1862, and supplemental acts of April 14, 1864, and July 23, 1866; also, the locations made with scrip under said acts.

No. 11. Statement exhibiting land concessions by acts of Congress to States for canal purposes from the year 1827 to June 30, 1872.

No. 12. Statement exhibiting land concessions by acts of Congress to States and corporations for railroad and military wagon road purposes from the year 1850 to June 30, 1872.

No. 13. Estimate of appropriations required for the office of the Commissioner of the General Land Office for the fiscal year ending July 30, 1874.

No. 14. Estimates of appropriations required to meet expenses of collecting the revenue from sales of public lands in the several States and Territories for the fiscal year ending June 30, 1874.

No. 15. Estimates of appropriations for the surveying department for the fiscal year ending June 30, 1874.

No. 16. Estimates of appropriations required for surveying the public lands for the fiscal year ending June 30, 1874.

No. 18. Connected map of the United States from ocean to ocean, exhibiting the extent of surveys, land districts, seats of surveyors general and district land offices; also, localities of railroads of general interest, and of mineral deposits, this being the map the plate of which is especially referred to in joint resolution No. 2, approved January 26, 1863, (12 Statutes, page 822.)

During the fiscal year ending June 30, 1872, there were received and registered 55,672 letters, and 45,963 were written and recorded.

In my last annual report I referred to the fact that when I assumed control of the General Land Office in February, 1871, nearly every branch of the business was largely in arrears. The returns of local land offices remained unposted for periods ranging from several months to two years. The adjustment of registers' and receivers' accounts was in a similar condition. The field notes of township surveys, to which it is necessary to make frequent reference, had not been indexed for ten years. About forty-seven thousand pieces of agricultural college scrip, which had been located, remained on the files of the office uncanceled, and, consequently, in such a condition as to involve the risk of its being abstracted and disposed of fraudulently. Notwithstanding the current business of the office has increased constantly and rapidly, all these arrears, and many others, have been brought up, and such progress made in the disposition of suspended and contested cases as to justify the belief that, by the end of the present fiscal year, they will be adjusted, and that, thereafter, parties who purchase lands of the Government will not, as heretofore, be subjected to the suspense, anxiety, and loss consequent upon a delay of half a dozen years or more in the adjustment of their entries. These results are mainly attributable to the industry and faithfulness of the clerks employed in the office, many of



whom not only performed what was required of them, but voluntarily contributed much of their time, after office hours, to the service of the Government.

I beg leave to repeat the suggestions made in my last annual report in relation to the reorganization of the clerical force and appointment of special agents.

When the vast extent of the public domain is taken into consideration, and when it is remembered that the validity of title to each and every tract, on which a home may be made, depends upon the accuracy with which the first details of transfer from the Government to its grantees are executed, the importance of exercising critical care in the adjustment of all matters pertaining to the disposal of public lands will be apparent.

There is not an owner of a home in many of the States in the prosperous valley of the Mississippi, nor in the rapidly growing regions beyond that river, who does not depend upon the records of this Bureau for evidence to complete the chain of title by which his home is held. Even from those regions of the West which have been peopled for the greatest length of time, this office is in constant receipt of applications for certified transcripts of records affecting the validity of title to lands, which for ten, twenty, and even fifty years, have been under cultivation.

Were every acre of land now owned by the Government sold or otherwise disposed of, there would still be ample necessity for the perpetuation of this Bureau, with a clerical force by no means small, to afford information and furnish papers respecting the original transfer of title from the Government. In many instances the necessity for these transcripts of records arises from errors and inadvertences, either in construing laws or in the execution of the details of transfer, both of which inevitably lead to expensive and protracted litigation.

With a view to prevent, as far as may be possible, the further occurrence of such cases, I am impelled to call your attention, with the hope that proper legislation to meet the case may be invoked, to the great importance of placing within the reach of this Bureau the means of securing such clerical aid as may be equal to a proper adjustment of the important questions constantly arising before it.

The work of the Bureau should not only be done, but it should be done well. When performed imperfectly it requires double labor to make corrections, and parties are subjected to vexatious delays and unnecessary expense in matters which it is the duty of the Government to render as speedy, simple, and inexpensive as possible. A knowledge of the laws and rulings of the land system cannot be acquired in a day, but it takes as long and careful study as to acquire a knowledge of any of the professions, and also much experience, before the necessary degree of proficiency is attained. When clerks have once gained this knowledge and experience their services are invaluable to the Government; but it is difficult to retain them, for the reason that the utterly inadequate salaries now paid too often fail to induce the more competent clerks to remain in the Bureau after becoming fully conversant with the laws and departmental rulings relating to our land system, there being always more advantageous opportunities to exercise that knowledge in legitimate pursuits outside of the office at rates of compensation with which the Government, under existing laws, cannot compete. The statutes relating to public lands are numerous and complicated. In construing them and in the adjustment of adverse claims arising under them, the questions this office is required to decide are sufficiently intricate to demand the best legal ability. The interests at stake are almost



invariably of great moment, in most cases involving the lawful and peaceable possession and enjoyment of the lands of men struggling through poverty to secure, by hard industry, for themselves and families a home. To dispose of these questions in a proper manner, competent clerks should be employed and retained. This cannot be done for the compensation now allowed by law.

The heads of the various divisions of the Bureau are charged with a responsibility second only to the head of the Bureau, and should, in my opinion, receive a salary of not less than \$2,400 per annum. The number of clerks of the higher grades should be increased; a proportionate number could be taken from the clerks of the first class. Under a reorganization like this the work will be done better, and there will be an actual saving of time and money by the avoidance of errors in its execution.

In the offices subordinate to the General Land Office—the offices of surveyors general, registers of district land offices, and receivers of public moneys—a growing necessity exists for some new system by which a more direct control can be had of the details of business pertaining to those offices, and by which irregularities may be corrected. It is a matter due alike to the public at large and the officers concerned. A constant source of annoyance is found in the frequent complaints alleging official malfeasance on the part of land officers, which come from every part of the country where the land system extends. It is but just to say that in many instances these complaints emanate from designing men or disappointed speculators, and are often utterly groundless when subjected to investigation. They nevertheless come in such shape as to require the time, trouble, and expense of a formal recognition and investigation. On the other hand, the charges are often well founded, and the protection of this office is invoked to prevent practices oppressive to the people. In either case the facilities of this Bureau should be sufficient to enable it to acquit its subordinates of charges when wrongfully made, or to fasten upon them the evidence of their malfeasance where they have been rightfully accused. Under present statutory provisions there is no adequate method by which satisfactory investigations can be made. It is true that a register can be called upon to report as to the alleged misconduct of a receiver, or *vice versa*; but the official relations of those officers are generally such as to render these investigations unreliable. Even when a special agent is delegated to examine into alleged misconduct, which can only be done at great inconvenience and expense, he finds himself embarrassed by his want of authority to compel the attendance of witnesses. What is needed, and for which I respectfully ask, is the authority to appoint two special agents, to be constantly in the employ of this Bureau, who may become familiar with the land laws and regulations, and who shall, subject to orders from this office, visit the different land districts with a view to examine into and report upon the manner in which the business is conducted. A salary of \$2,500 per annum should, in my opinion, be affixed to such office, and, in addition, the actual expenses of the agent while on duty should be borne. It is a system not new to other Departments of the Government, and it is believed to have been productive of a salutary effect in its workings.

That such a system, if adopted in connection with the administration of affairs of the Land Bureau, would result in subserving a good purpose, I have no doubt. Not only would the General Land Office be kept in closer *rapprochement* with the district officers; the officers be afforded an opportunity of explaining any false charges which might be brought



against them; the people secured in their rights against the unlawful acts of bad officers, but a great desideratum would be attained in having some one to superintend the removal of district offices, the opening of new offices, and the giving of instructions to officers when, without previous experience, they are appointed to those positions—matters which have, from the foundation of the Government to the present time, been productive of great hinderance to the smooth and correct working of the land system.

In changes of the officers referred to, which are frequent, the new appointees in a majority of cases bring to the discharge of their duties no experience or previous knowledge of such duties. From the very first day of their official life, business is forced upon them, and they are compelled to decide cases or construe statutes, and in their inexperience commit errors which may invalidate the title to hundreds of homesteads and prejudice the rights of hundreds of citizens. The details of business, so necessary to dispatch and correctness, can be learned only by long experience; and, before that is acquired, numerous complications arise. The result is seen in the mass of cases that burden our files and consume the time of the office—a result that could be avoided if this office possessed the facilities for sending competent persons to the spot to instruct the officers and start them aright.

In the correction of the evils alluded to by the appointment of special agents as herein asked, the Government would save directly a very large amount over the appropriation necessary to meet the expenses, while the saving, both of money and trouble, to the public would be probably still greater.

Respectfully submitted.

WILLIS DRUMMOND,  
*Commissioner.*

The Hon. SECRETARY OF THE INTERIOR.

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DEPARTMENT OF THE INTERIOR,  
GENERAL LAND OFFICE,  
Washington, D. C., October 26, 1872.

SIR: During the last fiscal year, ending June 30, 1872, surveys have been extended over an area of 29,450,939 acres of public lands which, added to the amount surveyed prior to that time, makes a total of 583,364,780 acres surveyed since the commencement of operations under the present system, leaving an estimated area of 1,251,633,620 acres unsurveyed.

These surveys, except in the Indian Territory and some of the older States where the Commissioner of the General Land Office is *ex officio* surveyor general, were prosecuted under the immediate supervision of the United States surveyors general for the following States and Territories:

*District of Kansas.*—Lawrence, Kansas, C. H. Babcock.  
*District of Minnesota.*—Saint Paul, Minnesota, C. T. Brown.  
*District of Dakota.*—Yankton, Dakota, W. H. H. Beadle.  
*District of Colorado.*—Denver City, Colorado Territory, W. H. Lessig.  
*District of Idaho.*—Boise City, Idaho, L. F. Cartée.  
*District of California.*—San Francisco, California, J. R. Hardenbergh.  
*District of Nevada.*—Carson City, Nevada, E. S. Davis.  
*District of New Mexico.*—Santa Fé, New Mexico, J. K. Proudfit.



*District of Oregon.*—Eugene City, Oregon, Wm. H. Odell.

*District of Washington Territory.*—Olympia, Washington Territory, L. P. Beach.

*District of Nebraska.*—Plattsmouth, Nebraska, E. E. Cunningham.

*District of Montana.*—Helena, Montana, John E. Blaine.

*District of Utah.*—Salt Lake City, Utah, C. C. Clements.

*District of Arizona.*—Tucson, Arizona, John Wasson.

*District of Florida.*—Tallahassee, Florida, M. L. Stearns.

*District of Louisiana.*—New Orleans, Louisiana, E. W. Foster.

*District of Wyoming.*—Cheyenne, Wyoming, Silas Reed.

Ten additional land districts have been established during the past year, making in all ninety-two offices for the accommodation of parties desiring to obtain title to public lands.

The following is a correct list of—

## UNITED STATES LAND OFFICES.

<i>Ohio.</i>	Council Bluffs.	<i>Oregon.</i>
Chillicothe.	Fort Dodge.	Oregon.
	Sioux City.	Roseburgh.
<i>Indiana.</i>	<i>Montana Territory.</i>	Le Grand.
Indianapolis.	Helena.	Linkville.
	<i>Arizona Territory.</i>	<i>Kansas.</i>
<i>Illinois.</i>	Prescott.	Topeka.
Springfield.	<i>Utah Territory.</i>	Salina.
	Salt Lake City.	Independence.
<i>Missouri.</i>	<i>Wisconsin.</i>	Concordia.
Boonville.	Menasha.	Wichita.
Ironton.	Falls of Saint Croix.	Cawker City.
Springfield.	Stevens Point.	<i>Washington Territory.</i>
	La Crosse.	Olympia.
<i>Alabama.</i>	Bayfield.	Vancouver.
Huntsville.	Eau Claire.	Walla-Walla.
Montgomery.	<i>California.</i>	<i>Nebraska.</i>
Mobile.	San Francisco.	West Point.
	Sacramento.	Beatrice.
<i>Mississippi.</i>	Marysville.	Lincoln.
Jackson.	Humboldt.	Dakota City.
	Susanville.	Grand Island.
<i>Louisiana.</i>	Stockton.	North Platte.
New Orleans.	Los Angeles.	Lowell.
Natchitoches.	Visalia.	<i>New Mexico Territory.</i>
Monroe.	Shasta.	Santa Fé.
	<i>Nevada.</i>	<i>Dakota Territory.</i>
<i>Michigan.</i>	Carson City.	Springfield.
Detroit.	Austin.	Vermillion.
East Saginaw.	Belmont.	Pembina.
Ionia.	Aurora.	Yankton.
Marquette.	Elko.	<i>Colorado Territory.</i>
Traverse City.	<i>Minnesota.</i>	Pueblo.
	Taylor's Falls.	Central City.
<i>Arkansas.</i>	Saint Cloud.	Denver City.
Little Rock.	Alexandria.	Fair Play.
Camden.	Jackson.	<i>Idaho Territory.</i>
Harrison.	New Ulm.	Boise City.
Dardanelle.	Litchfield.	Lewiston.
	Du Luth.	<i>Wyoming Territory.</i>
<i>Florida.</i>	Redwood Falls.	Cheyenne.
Tallahassee.	Oak Lake.	
Gainesville.		
<i>Iowa.</i>		
Fort Des Moines.		



The following table exhibits the progress of surveys and the disposal of public lands since the fiscal year ending June 30, 1861:

Fiscal year ending June 30—	Surveying districts.	Land offices.	Cost of survey.	No. of acres surveyed.	No. of acres disposed of.
1862.....	9	58	\$219,000 00	2,673,132	1,337,922.00
1863.....	11	54	151,840 00	2,147,981	2,966,698.00
1864.....	10	53	172,906 00	4,315,954	3,238,865.00
1865.....	10	53	170,721 00	4,161,778	4,513,738.00
1866.....	10	61	186,389 88	4,267,037	4,629,312.00
1867.....	12	62	423,416 22	10,808,314	7,041,114.00
1868.....	13	68	325,779 50	10,170,656	6,665,742.00
1869.....	12	66	497,471 00	10,822,812	7,666,151.00
1870.....	17	81	560,210 00	18,165,278	8,095,413.00
1871.....	17	83	683,910 00	22,016,607	10,765,705.00
1872.....	17	92	1,019,378 66	29,450,939	11,864,975.64

This shows an increase of the number of surveyors general from nine to seventeen, and of land offices from fifty-eight to ninety-two, and an increase in the annual survey from 2,673,132 acres to 29,450,939 acres, and an increase in the number of acres disposed of from 1,337,932 to 11,864,975.64, for the year ending June 30, 1872.

The appropriation for the present fiscal year was \$772,000, and there has been a corresponding increase in the amount of work executed in the field, but full returns have not yet been received.

## 2. SYNOPSIS OF THE SURVEYING SERVICE DURING THE PAST FISCAL YEAR.

*Louisiana.*—The act of March 3, 1871, appropriated the sum of \$12,240 for continuing the public surveys in this State during the fiscal year ending June 30, 1872. Under this appropriation the surveyor general entered into eleven surveying contracts. A portion of the work contracted for has been completed and returns made to this office; but three of the contractors are still prosecuting their work in the field. According to returns made to this office the subdivisional surveys were extended over an area of 224,928 acres, making the aggregate of lands surveyed in this State prior to June 30, 1872, 23,690,877 acres, and leaving unsurveyed at that date an area of 2,770,563 acres.

The surveyor general reports that the survey of the townships embracing the city of New Orleans has been completed. The location of a large city, with its straight streets and rectangular squares intersecting the boundaries of old private land claims at every possible angle, the irregular form of these claims, the conflict of boundaries, and the great value of lands, created a necessity for the greatest possible precision and accuracy in the execution of the work, and rendered it one of the most intricate and difficult surveys ever made under the present system. The satisfactory manner in which the work was accomplished entitles the surveyor-general to the highest commendation. I would respectfully invite attention to that part of his report herewith submitted referring to the act of Congress approved June 2, 1858, which provides for the issue of certificates of location for those private land claims which have been confirmed but not yet located or satisfied.

An estimate of \$26,100 is submitted for continuing the public surveys in Louisiana during the fiscal year ending June 30, 1874.

*Florida.*—By the act of March 3, 1871, there was appropriated for surveys in this State during the fiscal year ending June 30, 1872, the sum of \$12,500. The surveyor general entered into three surveying contracts which in the aggregate absorbed the entire appropriation.



The surveys made during the year were confined to the southern portion of the peninsula, and according to returns made to this office embraced an area of 354,389 acres, making the aggregate of lands surveyed to June 30, 1872, 28,092,409 acres, and leaving unsurveyed at that date an area of 9,839,111 acres.

For continuing the public surveys in this district during the fiscal year ending June 30, 1874, an estimate of \$12,000 is submitted.

*Oregon.*—There were appropriated for surveys in this State for the fiscal year ending 30th June last the following sums, viz: for surveying the public lands \$50,000, and for surveying Indian reservations \$24,000. Contracts were entered into by the surveyor general to the extent of the appropriations, and the surveys of the public lands were so distributed as to afford the greatest possible accommodation to the settlers, and to the various corporations, to which grants of land had been made by Congress. According to the returns made to this office there were surveyed in this district, during the past year 1,541,314 acres, making an aggregate of 12,220,795 acres surveyed to June 30, 1872, and leaving unsurveyed at that date 48,754,565 acres.

The surveyor general, in his annual report herewith submitted, earnestly recommends the extension of the public surveys in advance of settlements, particularly along the routes of the several military roads and railroads, as the want of these surveys retards settlement along these lines. Settlers cannot afford to expend the labor of years in improving lands which, when surveyed, may be found to be the property of some corporation; and, aside from the interest of settlers, the Government should urge forward to completion the surveys of lands within the several grants, in order that the companies may be enabled to select the lands inuring to them under the grants. This office fully concurs in the recommendation of the surveyor general, and, for the purpose of carrying the same into effect, an estimate of \$70,000 is respectfully submitted.

The surveyor general reports that the Oregon and California Railroad, to extend from Portland to the southern boundary of the State, is now in operation as far as Oakland, a distance of one hundred and eighty-one miles, and it will probably be completed to Roseburgh, eighteen miles farther, by the middle of November. The Oregon Central Railroad, at the date of the surveyor general's report, September 9, 1872, was nearly completed to Saint Joseph, on the Yamhill, and it was expected that it would be in running order by the first of October. The extension of the latter road up the west side of the Willamette River, to connect with the Oregon and California Road at Junction City, is contemplated; also, a branch road from Hillsborough to Astoria. Upon the completion of these lines, and one making connection with the Northern Pacific Railroad, and a line connecting the Columbia River with the Union Pacific Railroad, near the junction with the Central Pacific, Oregon will be rendered easy of access, and her fertile valleys and moderate climate will doubtless attract a great number of settlers.

Placer gold mines are being profitably worked on the waters of the John Day, Powder, and Burnt Rivers, and in Union County a valuable lode of copper ore has recently been discovered.

Coal has been discovered in the Calapooia Mountains, and at the head-waters of the Nehalem River, but the deposits have not yet been explored sufficiently to determine their extent and value.

The manufacturing interests of the State are in a flourishing condition, and are being extended as rapidly as the necessities of the country require.

*Minnesota.*—Under the appropriation of \$40,000 made by Congress



March 3, 1871, for surveying the public lands in Minnesota, the surveyor general reports that all the contracts entered into have been completed. The progress of surveys under the appropriation of \$75,000, per act approved June 10, 1872, is satisfactory, considering the unfavorable season for field operations in the Red River Valley, where the great amount of rain-fall inundated the country.

From the returns of partial surveys made by deputies, it appears that the northwestern portion of the State abounds in timber, and the surveyor general, referring to the trespasses committed on the timber in the pine region, recommends an early survey of said lands and the sale of the same by the Government as the best means of preventing the spoliation of the timber by lumbermen.

An estimate of \$50,000 is submitted for the survey of public lands in the State of Minnesota for the fiscal year ending June 30, 1874.

*California.*—By the act of March 3, 1871, there was appropriated for surveys in this State during the past fiscal year the sum of \$70,000. Under this appropriation, the surveyor general entered into thirteen surveying contracts, which in the aggregate absorbed the entire appropriation.

According to the returns made to this office, the subdivisional surveys were extended over an area of 1,724,675 acres, making 36,152,323 acres surveyed to June 30, 1872, and leaving at that date an estimated area of 84,795,517 acres unsurveyed.

For extending the lines of public surveys in this district during the fiscal year ending June 30, 1874, the sum of \$70,000 is submitted.

*New Mexico.*—The sum of \$10,000 was appropriated by act of Congress approved March 3, 1871, for continuing the public surveys in this Territory during the fiscal year ending June 30, 1872.

Two surveying contracts were entered into, creating an estimated liability of \$9,720. According to returns made to this office, the subdivisional surveys were extended over an area of but 2,990 acres, the greater part of the appropriation having been expended in extending the standard and township lines. The total area of land surveyed in this Territory at the close of the fiscal year was 4,422,975 acres, leaving unsurveyed at that date an area of 73,145,665 acres.

An estimate of \$30,000 for surveying the public lands in this district during the ensuing fiscal year is submitted.

*Utah.*—The surveyor general of this Territory reports that the appropriation of \$15,000 (act of March 3, 1871) was expended in a manner to meet the wants of settlers.

The lines of public surveys were extended over an area of 646,865.33 acres, which, with the previous surveys of 3,935,239 acres, makes a total of 4,582,104.33 acres surveyed prior to June 30, 1872, and leaves yet to be surveyed 49,482,970.67 acres. The report recites at length the improvements made in Utah. Within the past year a horse railway has been constructed at Salt Lake City, and cars are now running. Extensive gas works have been erected, also a brass and iron foundry, with accessories capable of supplying all kinds of castings for smelting works, &c. The year was very propitious to the farmer. The mining law of May 10, 1872, meets with general favor throughout the Territory, and the development of new mines has been greatly accelerated.

The success of the Utah Central Railway has caused capital to seek investment in connecting lines, and the construction of the Utah Southern Railroad, destined to connect with the 35th parallel at the most feasible point in Arizona, has been prosecuted with energy.

To meet the requirements of a continuous increase of population, and



the necessities of surveys growing out of the frequent discoveries of new mining fields, an estimate of \$25,000 is submitted for the extension of public surveys during the ensuing fiscal year.

*Washington Territory.*—By the act of March 3, 1871, there was appropriated for the survey of public lands in Washington Territory the sum of \$40,000, and deposits to the amount of \$2,978 were made by individuals, for surveys, prior to June 30, 1872.

The surveyor general reports that the public surveys made during the past fiscal year have greatly exceeded those of any former year.

The amount of land surveyed in the Territory at the close of the last fiscal year was 7,031,598 acres, leaving an estimated area of 37,764,562 acres yet to be surveyed.

For a detailed description of the mineral lands, timber, &c., I would refer to the ample report of the surveyor general of the Territory, which is printed herewith.

An estimate of \$70,000 is submitted for the extension of public surveys in Washington Territory for the fiscal year ending June 30, 1874.

*Kansas.*—The act of Congress approved March 3, 1871, appropriated for surveys in this district the sum of \$40,000. Five contracts were entered into by the surveyor general covering the entire appropriation.

The demands of settlers and the interests of the several corporations holding grants of land under act of Congress, were duly considered in selecting the localities to be surveyed. In addition to the surveys under the regular appropriation, the survey of fifteen townships was paid for out of special deposits made by railroad companies.

The tract of land known as the "Cherokee strip," about two and a half miles in width, extending along the southern boundary of the State, from the Neosho River to the 100th meridian west from Greenwich, was also surveyed during the year.

The subdivisional surveys were extended over an area of 3,277,440 acres, making the aggregate of lands surveyed in this State at the end of the last fiscal year 39,579,665 acres, and leaving unsurveyed at that date an estimated area of 12,463,855 acres.

An estimate of \$50,000 is submitted for the extension of public surveys in Kansas during the ensuing year.

*Nebraska.*—The surveyor general of Nebraska reports that surveys contracted for under the appropriation of \$40,000 per act of March 3, 1871, have been completed, and that eighteen contracts have been entered into, payable out of the appropriation of \$60,000 made June 10, 1872, and special deposits of \$41,438.54, made by the Burlington and Missouri River Railroad Company, under the provision of the twenty-first section of the act of July 2, 1864, (Statutes at Large, volume 13, page 365.)

In view of a very large immigration, reported to have reached 75,000 during the past year, and the rapid advance of settlements on agricultural lands, the surveyor general proposes to extend the lines of public surveys during the next year in the regions of the North Platte, Niobrara, and Loup Fork of Platte River, and an estimate of \$50,000 is submitted to enable him to accomplish that object. His report shows the completion of two hundred and fifty miles of railroad within the limits of the State during the past year, and is accompanied by a sectional map of Nebraska, exhibiting the progress and condition of the public surveys to June 30, 1872.

*Colorado.*—The surveyor general of Colorado, in submitting the official report of the operations of his office during the past fiscal year, prefaces the same with a detailed account of the progress made in all



departments of industry, such as agriculture, mining, railway enterprises, &c., the result of a steady and healthy immigration into that Territory.

The season has been a most favorable one for the farmer, and the mining interests were never in a more prosperous condition, eighty-nine mineral claims having been surveyed during the year. A number of railroads are in course of construction.

By act of March 3, 1871, \$70,000 were appropriated for the extension of the public surveys in Colorado. Contracts were entered into covering the entire appropriation, and the lines of public surveys extended over 2,076,002 acres, which, added to 8,902,899 acres surveyed prior to June 30, 1871, makes an aggregate of 10,978,901 acres surveyed at the close of the last fiscal year, and leaves an area of 55,901,099 acres unsurveyed in that Territory.

Apart from the survey of public lands under the above named appropriation, fifteen surveys were made under the deposit system provided by the act of Congress approved May 30, 1862, and the amendatory act of March 3, 1871, the deposits amounting to \$6,681.91. An estimate of \$50,000 is submitted for the extension of the public surveys in Colorado Territory for the next fiscal year.

*Dakota.*—Twenty thousand dollars were appropriated for surveys in this Territory for the last fiscal year, of which amount the sum of \$10,000 dollars was required by the act to be expended in the Pembina land district. The entire appropriation was used in the survey of 133 miles of standard lines, 437 miles of township lines, and 2,390 miles of section lines. The subdivisional surveys, according to the surveyor general's returns, embrace an area of 864,034 acres, making, in the aggregate, 7,441,462 acres surveyed prior to June 30, 1872, and leaving unsurveyed at that date an estimated area of 89,154,378 acres.

The surveyor general reports that the past summer has been the most favorable one for agriculture since the settlement of the Territory. A warm season and an abundant rain-fall have contributed to the production of unusually large crops. A considerable surplus of wheat was raised, which is being forwarded to eastern markets. The steady tide of immigration setting toward this Territory will probably be largely augmented during the next year, as increased facilities are offered by the several railroads completed to and across its eastern border. To meet the demands of settlers, and to enable railroad companies to make selections of lands granted to them by Congress, an estimate of \$50,000 is submitted for surveying the public lands in Dakota during the fiscal year ending June 30, 1874.

*Nevada.*—By an act of Congress approved March 3, 1871, there was appropriated for continuing the public surveys in Nevada during the last fiscal year the sum of \$45,000. Seven surveying contracts were entered into, absorbing the entire appropriation, and the subdivisional surveys were extended over an area of 1,289,233 acres, making the aggregate of lands surveyed in that State prior to June 30, 1872, 6,165,680 acres, leaving unsurveyed at that date 65,572,061 acres. The localities selected for field operations were the different valleys where parties had located with droves of cattle, horses, flocks of sheep, &c.

The surveyor general of Nevada, in his annual report to this office, furnishes a very interesting statement of the mining resources of that State, and the progress made in that industry during the past fiscal year. The total value of bullion produced during that year exceeded \$22,000,000.



For the extension of public surveys for the fiscal year ending June 30, 1874, an estimate of \$50,000 is submitted.

*Arizona.*—By the act of Congress approved March 3, 1871, there was appropriated for surveys in this Territory the sum of \$20,000. Six surveying contracts were entered into by the surveyor general, absorbing the entire appropriation.

The subdivisional surveys made during the year embrace an area of 517,332 acres, making the aggregate area of surveyed lands in Arizona, at the close of the last fiscal year, 2,468,675 acres, leaving unsurveyed at that date 70,437,629 acres. The surveyor general in his annual report urges an early survey of the boundaries of the several Indian reservations, in order that settlers may avoid establishing themselves upon them, and thus prevent those conflicts which are liable to arise between the settlers and the Indians until the legal limits of the reserves are definitely fixed and known.

Referring to the separation of the public lands from those claimed under Spanish and Mexican grants, he shows the necessity for congressional legislation creating a commission similar to that authorized by the act of March 3, 1871, for California, and indorses the suggestion made in the last annual report of this office on that subject.

Two parties of the Texas and Pacific Railway engineers are now within the Territory prosecuting the work of surveying the line of that road.

For the continuance of the public surveys in Arizona during the next fiscal year an estimate of \$30,000 is submitted.

*Idaho.*—The surveyor general's report, for the past fiscal year, shows that under the act of March 3, 1871, appropriating \$30,000 for the surveying service in Idaho, six contracts were entered into, exhausting the appropriation.

The surveys of exterior and subdivision lines were extended over the northern part of the Territory to Cœur d'Alene Lake, and over the grazing lands in the central portion thereof, covering an area of 870,749 acres, which, added to 1,524,055 acres previously reported, equals 2,364,804 acres surveyed prior to June 30, 1872. This deducted from 55,228,160 acres, the total area of Idaho, leaves 52,863,356 acres yet to be surveyed.

The surveyor general reports that the northern part of Idaho is rapidly filling up with settlers, and that about one hundred claims have been located there during the past year. He attributes this increase of settlement to the genial climate, fertility of soil, proximity to the Northern Pacific Railroad, and the Columbia River, which furnish superior facilities for travel and the transportation of merchandise and produce, and give this part of the Territory an advantage over the central and southwestern portions.

The report contains a detailed account of the mining interests, and shows that while mining is energetically prosecuted the agricultural products are more than adequate to the wants of the community. The surveyor general recommends the survey of the boundary of the Shoshone and Bannock Indian reservations, embracing 1,800,000 acres, and strongly urges some action on the part of Congress for the reclamation of barren and desert lands, and the protection of timber.

An estimate of \$40,000 is submitted for the survey of public lands in Idaho during the fiscal year ending June 30, 1874.

*Montana.*—The act of Congress approved March 3, 1871, appropriated the sum of \$40,000 for surveying the public lands in Montana Territory



during the fiscal year ending June 30, 1872. Eight contracts were entered into, covering an estimated liability of \$39,784.

The subdivisional surveys were extended over an area of 1,071,740 acres, making the aggregate of lands surveyed at the close of the fiscal year 3,530,908 acres, and leaving unsurveyed at that date an estimated area of 88,485,732 acres.

An estimate of \$50,000 is submitted for the surveying service in Montana during the next fiscal year.

*Wyoming.*—The sum of \$40,000 was appropriated for surveying the public lands in this Territory during the fiscal year ending June 30, 1872. Under this appropriation the surveyor general entered into fifteen surveying contracts, which in the aggregate absorbed the entire amount.

The lines of the public surveys were extended over an area of 766,070 acres, making an aggregate of lands surveyed in this district to June 30, 1872, of 1,854,343 acres, and leaving unsurveyed at that date 60,790,777 acres.

The field operations were confined to those lands suitable for agricultural or grazing purposes, to the lands falling within the limits of the Union Pacific Railroad, and to those localities containing coal, of which extensive and very valuable deposits have been discovered.

#### *Surveys of Indian reservations.*

(a.) *White Earth Indian reservation, in Minnesota.*—In conformity to the treaty of March 19, 1867, with the Chippewas of the Mississippi, this reservation, embracing an area of thirty-six miles square, was located by commissioners December 23, 1867, in the northwestern part of the State of Minnesota. It is bounded as follows, to wit: "Commencing at the southeast corner of township (141) one hundred and forty-one, range (37) thirty-seven; thence running north (36) thirty six miles; thence west (36) thirty-six miles; thence south (36) thirty-six miles; thence east (36) thirty-six miles to the place of beginning." It contains thirty-six townships, fifteen of which, covering 339,550.40 acres, have been subdivided into forty-acre tracts.

(b.) *The Cherokee strip, in Kansas.*—This tract, ceded to the United States, in trust, by the fourth article of the treaty of July 19, 1866, has been surveyed into legal subdivisions. The strip extends along the southern boundary of Kansas, from the right bank of the Neosho River to the 100th meridian west from Greenwich. Its average width is two miles and a half, and it embraces, by actual survey made and returned to this office, 434,679.36 acres; the proceeds of the sale will inure to the benefit of the Cherokees.

(c.) *Umatilla Indian reservation, in Oregon.*—This reservation is situated on the Umatilla River, in the northeast part of the State, and was established under treaty with the Walla-Walla, Cayuse, and Umatilla Indians of June 9, 1855. The boundaries of this reserve have been surveyed, and subdivision lines have been extended over 150,531.58 acres.

(d.) *Klamath Indian reservation, in Oregon.*—This lies east of the Cascade Mountains, near the southern boundary of the State. The survey of the exterior boundaries of this reservation has been completed, and it embraces fifteen townships which had been subdivided as public lands before the limits of the reserve were definitely fixed or known.

(e.) *Warm Springs Indian reservation, in Oregon.*—This reservation lies on the Des Chutes River, and between it and the Cascade Mountains, partly within townships 6, 7, and 9 south, range 12 east, Willa-



mette meridian. Subdivision lines have been extended over an area of 34,806.25 acres.

(f.) *Siletz Indian reservation, in Oregon.*—The lines of subdivisional surveys have been extended over lands situated in townships 9 and 10 south, ranges 9 and 10 west, of the Willamette meridian. This subdivision is into twenty-acre tracts, and embraces 17,191.75 acres.

(g.) *The Grand Ronde Indian reservation.*—This reservation, falling within townships 5 and 6 south, ranges 7 and 8 west, in Oregon, has been surveyed partly into twenty-acre tracts and partly into ordinary legal subdivisions, embracing in the aggregate 10,573.42 acres.

(h.) *Chickasaw lands in the Indian Territory.*—This extensive tract is situated north of the Red River, and is bounded as follows: On the south by the Red River, on the north by the Canadian River, on the east by the 98th degree of longitude west from Greenwich, and on the west by the 100th degree of longitude west from Greenwich. There being no surveyor general in this Territory, these lands were, at the request of the Indian Office and by direction of the Secretary of the Interior, subdivided into one hundred and sixty-acre tracts, under the immediate supervision of this office. This subdivision was required by the eleventh article of the treaty of April 28, 1866, with the Choctaw and Chickasaw Indians. The survey covers 1,350,107 acres, mentioned in my last annual report, and 3,299,851.60 acres surveyed during the fiscal year ending June 30, 1872, making an aggregate of 4,649,958.48 acres.

(i.) *The Cherokee, Creek, and Seminole lands.*—These lands were ceded to the United States for the use of various Indian tribes by the treaties of 1866. That portion of the Cherokee lands situated between the 96th and 98th degrees of longitude west from Greenwich, and the Creek and Seminole lands, were subdivided last year under contracts, entered into at the request of the Commissioner of Indian Affairs and by direction of the Secretary of the Interior, with surveyors designated by the Indian Office. The work was prosecuted with diligence. The survey embraced an area of 4,297,515 acres. Under the appropriations of \$150,000 and \$55,000, for surveying boundaries of Indian reservations and for subdividing portions thereof, made May 29, 1872, instructions have been issued or contracts let as follows: 1. For a further subdivision of the Nez Percé Indian reservation, in Idaho Territory, into twenty-acre tracts. 2. For the subdivision of 50,000 acres of that part of the Pawnee Indian reservation in Nebraska which lies south of the Loup Fork of the Platte River. 3. For the subdivision of the Sac and Fox reservation lying in Kansas and Nebraska, south of the Great Nemaha River and west of the Nohart Creek. This reserve was made for the Iowas by treaty of May 17, 1854, and was afterward ceded by them to the Sac and Fox Indians of Missouri by the treaty of March 6, 1861. 4. For the subdivision of the Cherokee, Creek, and Seminole ceded lands, lying west of the 98th and east of the 100th degree of west longitude from Greenwich, to the extent of the means set apart by the Indian Office, viz, \$80,000. 5. For the subdivision into forty-acre tracts of the Pottawatomie lands, in the Indian Territory, assigned them in lieu of their lands in Kansas. These lands are bounded on the north by the North Fork of Canadian River; on the east by the Seminole reservation; on the south by the Canadian River; and on the west by the lands ceded by the Creeks and Seminoles. 6. For the subdivision into eighty-acre tracts of the La Pointe Indian reserve, in Wisconsin. Under act of Congress approved May 29, 1872, authorizing the removal of certain Indians to this reservation, instructions were issued to the surveyor general of Minnesota to contract for the subdivision of the townships in this reservation



not heretofore subdivided. 7. For the survey of the boundaries of the reservations of the Chippewas of the Mississippi and of the Red Lake, in Minnesota, pursuant to treaties of February 22, 1855, and October 2, 1863. 8. Seneca Indian reservation in the Indian Territory. This tract is bounded on the east by the State of Arkansas and on the south by the Cherokee national lands. The boundary lines formerly surveyed having been obliterated to such an extent as to preclude the possibility of their identification, the Secretary of the Interior, acting on reports of the Superintendent of Indian Affairs, showing that the timber upon the Seneca lands was being despoiled by trespassers, directed a resurvey and the re-marking of the southern and eastern boundary lines of said lands. In accordance therewith instructions were issued by this office to the surveyor general of Kansas, and a contract has been entered into by that officer for such resurvey.

*State and Territorial boundaries.*

*The northern boundary of Utah.*—Under the appropriation of \$6,480, made for the survey of this boundary, March 3, 1871, a contract was entered into by this office, dated May 18, 1871, with Daniel G. Major, and the work has been executed in a satisfactory manner. The boundary coincident with the 42d parallel of north latitude is common to the Territories of Utah and Idaho, and extends from the 34th to the 37th degree of west longitude from Washington. The length of the boundary line, as established by this survey, is 153 miles 56 chains, and it passes over a rugged and mountainous country. The survey places several towns and settlements in Idaho, which had previously been under the jurisdiction of Utah.

*The eastern boundary of California.*—Under the appropriation of \$41,250, made June 10, 1872, for the survey of the eastern boundary of California, a contract was entered into with Alexey W. Von Schmidt, of California, who is now prosecuting the work of said survey.

*The northern boundary of Nevada.*—Pursuant to act of Congress approved June 10, 1872, making an appropriation of \$15,500 for the survey of this line, a contract has been made with Daniel G. Major, of California, to survey said boundary line.

*The southern boundary of Wyoming.*—An appropriation of \$22,200 having been made by Congress for the survey of this boundary line, a contract has been entered into with Alonzo V. Richards to survey the same.

*The western boundary of Kansas.*—Under the appropriation of \$8,400 for the survey of this boundary, a contract was entered into with John J. Major.

*The northern boundary of Nebraska.*—No contract has been entered into for the survey of this boundary, for which an appropriation of \$8,800 was made by Congress on the 10th of June last, owing to the fact that the Commissioner of Indian Affairs thought that the prosecution of the work at this time would excite and cause trouble with the Indians in that locality.

*Estimates for survey of boundary lines.*—The extension of the lines of public surveys to the vicinity of State and territorial boundaries, the advance of settlements, the construction of railroads, demanding an adjustment of their grants, and the difficulty of settling questions of jurisdiction between States and Territories, create a necessity for an early survey of the following boundaries: 1. The Washington-Idaho boundary. 2. The eastern boundary of Idaho. 3. So much of the



southern boundary of Colorado as lies between the southeast corner thereof and the northwest corner of New Mexico. 4. That part of the eastern boundary of New Mexico which lies between the northwest corner of the State of Texas and the 37th parallel of north latitude. I have, therefore, submitted estimates for the survey of these lines. In connection with the subject of State and territorial boundaries, it is proper to remark that since my last annual report, in which I referred to the difficulties existing in consequence of the controversies as to the location of the boundary line between Georgia and Florida, evidence has been submitted to this office showing that a survey had been made in 1859 and 1860, under the joint authority of the States of Georgia and Florida, by Messrs. Whitner and Orr, and I am in receipt of an official copy of said survey, to which reference is made in the act of Congress approved April 9, 1872, and with the aid thereof it will be in the power of the surveyor-general of Florida to close the lines of public surveys on the true boundary.

Reference is made to the tabular statement showing the area embraced in the surveys of public lands and Indian reservations during the fiscal year ending June 30, 1872, also the total quantity of lands surveyed under the present system and the area of unsurveyed lands in each State and Territory.

Estimates for appropriations for the surveying service for the fiscal year ending June 30, 1874, are submitted.

The extent of public surveys, limits of surveying and land districts, location of land-offices and railroad lines are shown by a connected map of the United States accompanying this report.

I append the annual reports of the different surveyors general, accompanied by maps showing the progress of public surveys, topographical features of the respective districts, and other matters of interest.

### 3.—OF PRE-EMPTIONS.

No material change has been made in the laws relating to pre-emption rights since my last report.

Any person seeking the benefits of pre-emption under the laws now in force must be the head of a family, a widow, or a single man over twenty-one years of age, a citizen of the United States, or must have filed a declaration of intention to become such, and not the owner of 320 acres of land within the United States, and must be a person who has not quit or abandoned his or her own land in the same State or Territory to reside upon the public lands.

Actual settlement upon the tract claimed, for the exclusive use and benefit of the pre-emptor, and not for purposes of sale or speculation, must be shown, under the rules and regulations of the Department, to the satisfaction of the register and receiver. Upon these simple requisites entry may be made to the extent of one quarter-section or other compact body, not exceeding 160 acres, upon any of the public lands of the United States to which the Indian title has been extinguished, except in the States of Alabama, Mississippi, Louisiana, Arkansas, and Florida, in which, by special act of Congress of June 2, 1866, the public lands are brought exclusively under the provisions of the homestead act.

To secure these privileges the settler must comply with the provisions of law as expressed in the acts of Congress, which are substantially as follows: Upon offered lands, which designation for the purposes of the statute is held to cover all lands which have once been formally



offered at public sale, even though afterward temporarily withdrawn, he must file with the register of the proper land office his written declaratory statement, describing the tract and giving the time of settlement. This filing must be made within thirty days after settlement, and within twelve months from such date of settlement he must present proof of cultivation, and make payment for the land so described. Upon unoffered lands the filing must be made within three months from the date of settlement, and within thirty months from such prescribed date of filing, or thirty-three months after settlement, the requisite proof and payment must be made. When the settlement is upon unsurveyed lands of course no filing can be made, describing it by legal subdivisions, but after survey, and within three months after the filing of the township plat in the district land office, the settler must file his declaratory statement, and within thirty-three months from the filing of the township plat, proof and payment are required.

Forfeiture of the land claimed is incurred by failure to comply with either of the respective conditions named above. If, however, a party has a legal settlement, and actually files his declaratory statement before the inception of any adverse right, he is held to be entitled to a preference over a subsequent settler, though he may have neglected to file within the precise period named in the statute. This principle has been fully settled by decision of the United States Supreme Court rendered December 11, 1871, in the case of *Johnson et al. vs. Towsley*, which has been followed by the Department since its rendition. It will be observed that the rule laid down in my last annual report has been modified by this decision.

The practice referred to in my last annual report of declining to reopen pre-emption cases after proof satisfactory to the Department has been made and entry admitted, except upon a showing of an actual adverse interest, prior to such entry, has been strictly adhered to; and having been sustained by repeated decisions on appeal to the Department proper, may now be considered as the settled rule of administration. This rule is applied to homestead as well as pre-emption entries.

I would respectfully but earnestly renew my recommendation of last year, for a complete consolidation of the statutes respecting settlement rights into a general homestead law, giving the first settler the right of entry. For this purpose a bill was prepared by this office last winter, and submitted to the appropriate committees of the Senate and House of Representatives, with a request for favorable action. This bill, with a slight amendment, passed the Senate too late in the session for action by the House.

By limitation of the statute of July 14, 1870, amended by resolution of March 3, 1871, all filings based on settlement prior to April 14, 1870, in the States and Territories not specially provided for by subsequent acts, ceased to have any legal *status* on the 14th of July last.

Many settlers, who have deliberately allowed the time to elapse without making proof and payment, have since applied to file again for the same tract, alleging a new settlement subsequent to the limitation. As this is a manifest attempt to evade the law requiring proof and payment, and as a settler has really but one settlement on a tract, this office has ruled that he cannot thus escape the obligation of the law, and at the same time secure its benefits. To allow this would defeat the object of the legislation, and make a farce of congressional enactments designed for the wise purpose of securing from the settler perfect good faith in prosecuting his claim. While this rule has been adopted care has been taken to favor any settler who has, without fraudulent



intention, negligently allowed his preference right to expire. Such settler has been permitted to prove up his claim and make entry even after the lapse of the statutory period, provided he presented his claim before any valid adverse interest had attached to the land.

This rule seems in accord with the settled policy of the Government to recognize, first, the claim of the actual settler in the disposal of the public lands, while it also operates as an incentive to the exercise of good faith and diligence on the part of the claimant by holding him responsible for his own negligence.

The devastating fires that swept over portions of Michigan, Wisconsin, and Minnesota during the fall of 1871 rendered it difficult for pre-emptors to make payment for their lands within the time prescribed by existing laws. Congress, therefore, extended the time in those States for one year, thus rendering material aid to the settlers who had suffered by the fire.

Numerous special acts have been passed bringing into market Indian and other reservations in various localities, all of which have received due attention, and the necessary instructions have been issued for carrying them into effect at the earliest practicable period.

#### 4.—TOWN-SITES.

There has been no legislation by Congress, since the date of my last report, relative to the location of town-sites upon the public lands. It is now held by the office that patents may issue to the proper authorities for lands claimed as mineral, stating that no title shall "be hereby acquired to any mine of gold, silver, cinnabar, or copper, or to any valid mining claim or possession held under existing laws of Congress." This obviates the necessity of suspending the issue of a patent, until the non-mineral character of the land has been shown, and allows parties claiming lots on a town-site to obtain title thereto at an early day after the entry has been made, while any part of the land upon which minerals exist is specially reserved and excepted from the operation of the patent.

A great number of towns have been built in California, Utah, and Kansas, and they have aided materially in developing the wealth of the country.

The returns for the past year show a rapid increase in the number of towns upon the public domain, and the consequent enhancement in the value of surrounding lands is a matter of peculiar interest to the country. Many of these towns are situated upon the lines of the railroads already built, and upon the routes of those projected, but a large number have also been located in regions remote from the line of any railroad, thus forming the *nuclei* around which hardy pioneers have gathered and established their homes upon the lands in the immediate neighborhood.

#### 5.—HOMESTEAD LAW.

The demand for the benefits of the homestead law still increases, with results showing the wisdom of the law as a measure for quickening the expansion of the productive area and material wealth of the country by offering land for homes at a nominal cost to the hardy pioneers of our American civilization. In its appropriate place in this report is given an exhibit of the number of acres taken up as homesteads in the several States and Territories containing public lands, with the aggregate number in all, during the last fiscal year.



At the last session of Congress the homestead law was amended by the act of June 8, 1872, in favor of parties who served in the Army or Navy of the United States, for ninety days or more, during the late war, conceding to this meritorious class, on account of their services to the country, certain rights not allowed in the general law, in taking up homesteads on the public lands. Under this act the following instructions were issued to the several district land offices :

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
June 13, 1872.

GENTLEMEN: Attached is a copy of the amended law of Congress granting homesteads to soldiers and sailors, their widows and orphan children.

This law allows—

1st. Every soldier and officer of the Army, and every seaman, marine, and officer of the Navy, who served for not less than ninety days in the Army or Navy of the United States “during the recent rebellion,” and who was honorably discharged, and has remained loyal to the Government, to enter, under the provisions of the homestead law, one hundred and sixty acres of the public land, including the double minimum lands.

2d. That the time of service, or the whole term of enlistment, when discharged on account of wounds or disability, shall be deducted from the time heretofore required to perfect title: *Provided, however,* That the person shall reside upon, improve, and cultivate his homestead for a period of at least one year after he shall commence his improvements. It is required that the period (whether one year or more) of actual residence, improvement, and cultivation that may be found necessary to perfect each case of entry under this act, shall follow immediately upon the date of entry.

3d. That any person entitled to the benefit of this act, and who has heretofore made a homestead entry of less than one hundred and sixty acres, may enter under this act an additional quantity of land contiguous to the first entry, which shall make in the aggregate one hundred and sixty acres.

4th. That the widow, if unmarried, or in case of her death or marriage, then the minor orphan children of a person who would be entitled to the benefits of this act, may enter lands under its provisions, with the additional privilege accorded, that if the person died during his term of enlistment, the widow, or minor children, shall have the benefit of the whole term of enlistment.

5th. That where a person may heretofore have made an entry under the homestead laws while in the United States military or naval service, or before entering such service, the time of service shall be equivalent to a residence for the same length of time upon the tract so entered: *Provided,* That the party shall show at least one year's continued residence upon, and improvement and cultivation of, the tract. The law also reinstates such entries as may have been canceled because of the party's absence from the land while in the military or naval service, provided the land has not been disposed of. And where it has been disposed of, the statute authorizes another entry and the application to the second entry of the proofs touching his residence and improvement on the first tract.

6th. That any person entitled to the benefit of this act may file his claim for a tract of land through an agent, and shall have six months thereafter within which to make his entry and commence his settlement and improvement upon the land.

The last section of the act authorizes the Commissioner of the General Land Office “to make all needful rules and regulations to carry into effect the provisions” of the act.

Therefore, when application shall be made to enter a tract of land under the provisions of this act, you will permit—

1. *In case of original claimants,* immediate entry to be made; but if the party so elects, he may file a declaration to the effect that he claims a specified tract of land as his homestead, and that he takes it for actual settlement and cultivation. These statements you will enter upon your record and report in an abstract as homestead declarations, commencing the series with number one.

Thereafter, and at any time within six months from the date of said declaration, you will allow the principal to make, in the usual manner, a homestead entry of the tract. These entries you will report with your regular series of homesteads, using, however, the forms hereto attached. Should the party present his declaration through an agent, as authorized by the fifth section, said agent must produce a duly executed power of attorney from the principal desiring to make the entry, who will be bound by the selection his agent may make, the same as though made by himself. Failure on the part of a principal to make entry of the tract filed upon by himself, or agent, within six months from the date of said filing, will be regarded as an abandonment, and will entail a forfeiture of all right of the said principal to the benefits of this act.

2. *Claims of widows and orphan children.*—The initiation of a claim by declaration will be the same as in the first instance. When making the homestead entry the widow



must make affidavit of her widowhood and right to enter; and in case of minor orphan children, the duly appointed guardian must file certified copies of the power of guardianship when making the declaration, which must be transmitted with the abstract of such declaration. It is not *compulsory* in any case that a party when applying in person should first file a declaratory statement. That is a privilege accorded him, but he may at once make an entry of the land upon the proofs necessary to show his right under the law.

3. *Settlers whose entries have been canceled.*—The applicant must make oath that he had made an entry while in the military or naval service, or prior to such service, giving the date of entry, and describing the tract of land entered; that he went upon or returned to the land within six months from the date of his discharge from the service, and that his entry was canceled by reason of his absence from the claim for more than six months while in the United States service. This affidavit you will transmit, with a report of the condition of your records, for the examination of this office, when, if found correct, and the land covered by the original entry is found to be undisposed of, the entry will be reinstated on the records, and the applicant allowed to make proof that he had settled upon, improved, and cultivated the tract, which proof, if satisfactory, will entitle him to a patent. If the tract has been disposed of he will be allowed to select another homestead, and the proof of settlement and cultivation of the first tract may be used by him in proving his claim in the second entry. *You will not, however, allow any entry under this head except upon instructions from this office.*

5. *Applicants for additional land.*—Such persons will file their applications for the tract desired, which must be *contiguous to the original homestead*. The entire tract must not exceed one hundred and sixty acres, except in the nature of an immaterial excess, caused by the fractional character of some subdivisions of the public surveys, such as is now allowed in similar cases. The application must be accompanied by the prescribed evidence of the military or naval service of the applicant and of his right to the benefit of the law. An entry of additional land will take current date.

A, B, C, D, are forms of declaration, application, affidavit, and receipt to be used under this law, and you will be careful to use them in all cases arising under it. In addition to these forms you will require, when entries are made in the future—

1st. From original applicants, certified copies of certificates of discharge, showing when the party enlisted and when he was discharged, or, if these cannot be procured, then satisfactory evidence on these points.

2d. In case of widows, evidence of military service of husband and affidavit of widowhood.

3d. In case of minor orphan children, in addition to evidence of military service, proof of death or marriage of the mother. Evidence of death may be the testimony of two witnesses or a certificate of a physician duly attested. Evidence of marriage may be certified copy of marriage certificate, or of the record of same, or testimony of two witnesses to the marriage ceremony.

The register and receiver will be allowed to charge one dollar each for receiving and filing the initiatory declaration of the parties whenever they exercise the privilege of first filing such declaration, but you will take care to advise applicants that such declaration is not necessary where they first apply in person to make an actual homestead entry. This fee the receiver will account for in the usual manner, indicating the same therein as fees for "homestead declarations," which will be charged against the maximum of \$3,000 now allowed by law. In the States and Territories, for which 50 per cent. additional is allowed by the sixth section of the act of March 21, 1864, the additional allowance will apply to the fee herein named.

Should any doubt arise in your mind upon any point in the law, you will promptly communicate with this office and await instructions in the premises.

WILLIS DRUMMOND,  
Commissioner.

To REGISTERS AND RECEIVERS  
Of United States Land Offices.

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FORM A.

HOMESTEAD DECLARATION.

LAND OFFICE, ————.

No. 1.

I, ————, do hereby declare and give notice that I claim for a homestead, under the act of June 8, 1872, granting homesteads to honorably discharged soldiers



and sailors, their widows and orphans, the ————; and I further declare that I take the said tract of land for actual settlement and cultivation, and for my own use and benefit.

Per ————, his Attorney in Fact.

FORM B.

APPLICATION.

LAND OFFICE, ————, 187 .

I, ————, hereby apply to enter, under the provisions of the act of June 8, 1872, amendatory of an act entitled "An act to enable honorably discharged soldiers and sailors, their widows and orphan children, to acquire homesteads on the public lands of the United States," the ————, containing ———— acres, and for which I filed my declaration on the ———— day of ————, ————, through ————, my duly appointed agent.

I, ————, register of the land-office at ————, do hereby certify that ———— filed the above application at this office on the ———— day of ————, ————, and that he has taken the oath and paid the fees and commissions prescribed by law.

Register.

FORM C.

AFFIDAVIT.

LAND OFFICE, ————, 187 .

No. —.

I, ————, of ————, do solemnly swear that I am a ————, of the age of twenty-one years, and a citizen of the United States; that I served for ninety days in company ————, ———— Regiment United States Volunteers; that I was mustered into the United States military service the ———— day of ————, ————, and was honorably discharged therefrom on the ———— day of ————, ————; that I have since borne true allegiance to the Government; and that I have made my application No. —, to enter a tract of land under the provisions of the act of June 8, 1872, giving homesteads to honorably discharged soldiers and sailors, their widows and orphan children; that I have made said application in good faith; and that I take said homestead for the purpose of actual settlement and cultivation, and for my own exclusive use and benefit, and for the use and benefit of no other person or persons whomsoever; and that I have not heretofore acquired a title to a tract of land under this or the original homestead law, approved May 20, 1862, or the amendments thereto, or voluntarily relinquished or abandoned an entry heretofore made under said acts: so help me God.

Sworn and subscribed to before me, ————, register of the land-office, at ————, this ———— day of ————, 187 .

Register.

FORM D.

RECEIPT.

No. —.

Use same form as now in use with change of act.

AN ACT to amend an act relating to soldiers and sailors' homesteads.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act entitled "An act to enable honorably discharged



soldiers and sailors, their widows and orphan children, to acquire homesteads on the public lands of the United States," approved April fourth, eighteen hundred and seventy-two, be, and the same is hereby, amended so as to read as follows: That every private soldier and officer who has served in the Army of the United States during the recent rebellion for ninety days, or more, and who was honorably discharged, and has remained loyal to the Government, including the troops mustered into the service of the United States by virtue of the third section of an act entitled "An act making appropriations for completing the defenses of Washington, and for other purposes," approved February thirteenth, eighteen hundred and sixty-two, and every seaman, marine, and officer who has served in the Navy of the United States, or in the Marine Corps, during the rebellion, for ninety days, and who was honorably discharged, and has remained loyal to the Government, shall, on compliance with the provisions of an act entitled "An act to secure homesteads to actual settlers on the public domain," and the acts amendatory thereof, as hereinafter modified, be entitled to enter upon and receive patents for a quantity of public lands (not mineral) not exceeding one hundred and sixty acres, or one quarter-section, to be taken in compact form, according to legal subdivisions, including the alternate reserved sections of public lands along the line of any railroad or other public work, not otherwise reserved or appropriated, and other lands subject to entry under the homestead laws of the United States: *Provided*, That said homestead settler shall be allowed six months after locating his homestead, and filing his declaratory statement, within which to make his entry and commence his settlement and improvement: *And provided also*, That the time which the homestead settlers shall have served in the Army, Navy, or Marine Corps aforesaid shall be deducted from the time heretofore required to perfect title; or if discharged on account of wounds received or disability incurred in the line of duty, then the term of enlistment shall be deducted from the time heretofore required to perfect title, without reference to the length of time he may have served: *Provided, however*, That no patent shall issue to any homestead settler who has not resided upon, improved, and cultivated his said homestead for a period of at least one year after he shall commence his improvements as aforesaid.

SEC. 2. That any person entitled, under the provisions of the foregoing section, to enter a homestead who may have heretofore entered, under the homestead laws, a quantity of land less than one hundred and sixty acres, shall be permitted to enter, under the provisions of this act, so much land contiguous to the tract embraced in the first entry as, when added to the quantity previously entered, shall not exceed one hundred and sixty acres.

SEC. 3. That in case of the death of any person who would be entitled to a homestead under the provisions of the first section of this act, his widow, if unmarried, or in case of her death or marriage, then his minor orphan children, by a guardian duly appointed and officially accredited at the Department of the Interior, shall be entitled to all the benefits enumerated in this act, subject to all the provisions as to settlement and improvements therein contained: *Provided*, That if such person died during his term of enlistment, the whole term of his enlistment shall be deducted from the time heretofore required to perfect the title.

SEC. 4. That where a party at the date of his entry of a tract of land under the homestead laws, or subsequently thereto, was actually enlisted and employed in the Army or Navy of the United States, his services therein shall, in the administration of said homestead laws, be construed to be equivalent, to all intents and purposes, to a residence for the same length of time upon the tract so entered: *Provided*, That if his entry has been canceled by reason of his absence from said tract while in the military or naval service of the United States, and such tract has not been disposed of, his entry shall be restored: *And provided further*, That if such tract has been disposed of, said party may enter another tract subject to entry under said laws; and his right to a patent therefor may be determined by the proofs touching his residence and cultivation of the first tract and his absence therefrom in such service.

SEC. 5. That any soldier, sailor, marine, officer, or other person coming within the provisions of this act may, as well by an agent as in person, enter upon said homestead by filing a declaratory statement as in pre-emption cases: *Provided*, That said claimant in person shall within the time prescribed make his actual entry, commence settlements and improvements on the same, and thereafter fulfill all the requirements of this act.

SEC. 6. That the Commissioner of the General Land Office shall have authority to make all needful rules and regulations to carry into effect the provisions of this act.

Approved June 8, 1872.

It has also been found necessary to decide a variety of questions arising in actual cases thereunder. This, in connection with frequent inquiries from parties interested in its provisions, which required answers, has added much to the correspondence of this office. Since the date



of my last annual report, which embraced a recommendation (page 31) for legislation to allow parties commuting homestead entries under the eighth section of the act of May 20, 1862, to use in paying therefor agricultural college scrip issued under the act of July 2, 1862, on an equal footing with pre-emptors paying for their claims under the act of July 1, 1870, it was decided by the Secretary of the Interior that such parties are entitled to do this, under existing laws. This office has conformed to the Secretary's decision, allowing this description of scrip to be received in homestead commutations. Hence the additional legislation recommended is not now regarded as necessary.

#### 6. GRADUATED LANDS.

Attention was called in my last annual report (page 32) to the unadjusted cases under the graduation law of August 4, 1854. I respectfully repeat the suggestion there made, that an act be passed by Congress confirming the entries allowed under that law in all cases where the present owners may submit, within two years from passage of the act, satisfactory proof that they have made substantial and valuable improvements on the land claimed by them, and providing further that in all cases where such proof shall not be submitted within the time fixed by said act the entries shall be canceled.

#### 7. PUBLIC SALES OF TIMBER LANDS.

During the last fiscal year, the President's proclamation was issued for public sales of valuable timber lands in the State of Minnesota, to be held at Saint Cloud on the 16th of September, 1872, embracing the public lands in 113 townships; at Taylor's Falls on the 30th of September, 1872, embracing the public lands in 10 townships; at Litchfield on the 7th of October, 1872, embracing the public lands in 105 townships; and at Du Luth on the 4th of October, 1872, embracing the public lands in 49 townships. Subsequently, by order of the President, the sale proclaimed to take place at Saint Cloud was postponed to the 16th of December, 1872; that at Taylor's Falls to the 23d of December, 1872, and that at Du Luth to December 30, 1872.

Steps are now being taken for offering at public sale, after proclamation by the President, as early in the coming winter as practicable, valuable timber lands in 20 additional townships at Saint Cloud, and in 19 townships at Oak Lake, in the same State.

#### 8. TIMBER DEPREDATIONS.

The preservation of the timber growing upon the public lands of the United States is a matter of great importance to the various interests connected with the cultivation of the adjacent agricultural lands, to the pursuit of mining, the building of new cities and towns, or the growth of those already established; in short, to the diversified industries prosecuted in all parts of the Republic where timber is required. The demand so universally existing for this necessary article gives rise to depredations on the public timber on the part of speculators and others, leading, if unchecked, to extensive spoliation and waste, far in excess of the legitimate wants of the community, and likely, in a comparatively short time, to destroy what should be protected to meet the anticipated requirements of the future. Complaints of this evil, which had attained great magnitude, led to special efforts on the part of the Department



to protect the timber as an incident to the administration of the laws regarding the public lands. Under the act of Congress approved March 3, 1831, as construed by the Supreme Court of the United States, it is made a criminal offense, punishable with fine and imprisonment, to cut or remove timber from any of the public lands, except as allowed for domestic purposes to actual settlers thereon. In reference to this matter, supervising authority was transferred to this office in 1855, and the registers and receivers of the district land offices were required to act without additional compensation as local agents for guarding the timber in their respective districts. They are instructed to seize all timber which they ascertain to have been cut from the public lands, for the purpose of sale or speculation, to sell the same to the highest bidder, after public notice, and pay the proceeds into the Treasury of the United States, reporting the cases to the district attorney for the prosecution of the offenders under the penal law, yet with authority, in cases where mitigating circumstances appear, to compromise with the parties, release the timber, and refrain from criminal prosecution, on their defraying all expenses incurred, and paying a reasonable stumpage for the timber. Under this system the depredations, although not suppressed, have been checked to a considerable degree, not only without cost, but with a clear gain to the Treasury, after paying incidental expenses.

#### 9. SWAMP AND OVERFLOWED LANDS.

Under the acts of Congress granting swamp and overflowed lands to the States in which they are situated, 62,428,412.88 acres have been selected and reported to this office.

Of these selections 8,197,345.95 acres have been approved under the act of 1849, such approval having the force and effect of a patent, and 38,166,913.20 acres have been approved and patented under the act of 1850.

In addition to the lands in place approved and patented as above, 385,631.94 acres have been selected and patented, pursuant to the provisions of the act of March 2, 1855, as indemnity for swamp lands entered with warrants and scrip, making an aggregate of 46,749,891.09 acres approved and patented as swamp and indemnity lands.

During the past year 714,255.19 acres have been formally approved, and 264,318.38 patented.

Under the indemnity act of March 2, 1855, adjustments have been made within the year as follows: Cash indemnity accounts allowed, \$8,464.97; land indemnity, 13,057.84 acres. The total amount of indemnity adjusted and allowed since the passage of the indemnity act is \$736,956.13 for cash entries of swamp lands, and 650,319.65 acres for swamp lands located with warrants or scrip.

For the purpose of making a final and speedy adjustment of the remaining claims for indemnity, this office, with the approval of the Secretary of the Interior, issued the following instructions:

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., March 18, 1872.

In order to make a final disposition of all claims for indemnity provided for by the acts of Congress approved March 2, 1855, entitled "An act for the relief of purchasers of swamp and overflowed lands," which act was extended by the act of March 3, 1857, the following rules and regulations in regard to the "due proof" to be made to the Commissioner of the General Land Office, under the second section of said act, in order to obtain the indemnity aforesaid, have been adopted by this office, viz:

1st. No *ex parte* testimony will hereafter be considered, except such as may have been



already forwarded to this office, taken in strict accordance with the rules and regulations of the office existing at the time of taking the same.

2d. The State, or its agent, claiming such indemnity will be required to furnish this office with a list of the lands on which such indemnity is claimed, and indicate the time when the claimants will be prepared to offer testimony to establish the swampy character of the land.

So soon after receiving such list as practicable, this office will appoint times and places when and where such testimony will be taken, and will give the claimants at least thirty days' notice thereof.

At the times and places thus fixed some person accredited by this office will attend for the purpose of examining witnesses and adopting such other measures as may be necessary to protect the interests of the Government.

When the testimony is thus taken the case will be considered by this office as closed, and no further evidence will afterward be received.

The testimony in support of such claims must be the evidence of at least two respectable and disinterested persons who have personal and exact knowledge of the land as it existed on the 28th September, 1850, the date of the swamp grant. Said witnesses must not only state that the greater part of each forty-acre tract, or other smallest legal subdivision, was, on the 28th September, 1850, swamp and overflowed within the meaning of the grant, but at what seasons and to what extent this was its condition, designating particularly, also, how much or what proportion of the tract was thus rendered unfit for cultivation in its natural condition.

They must also give the reasons for their conclusions, state the causes of the overflow, give name and description of the timber, shrubs, and plants on the land, character and extent of the means necessary for their reclamation, contiguity of rivers, water-courses, lakes, &c., with a general description of the adjacent and surrounding tracts, and whether plowing and the removal of the timber without ditching or draining would not at that time have caused the water to disappear.

They must also state and show what is the present condition of the land, and, if any changes have occurred in the character or quality thereof, what has caused such changes.

The witnesses here contemplated should be the person who purchased the land of the United States and the present owner or occupant. Where the original purchaser is a non-resident of the State, or had no knowledge of the character of the land in 1850, or for any reason refuses to testify, or where the tract is unoccupied, or the occupant is in like manner uninformed, or refuses to testify, the facts herein required may be established by the testimony of two other respectable and disinterested witnesses resident nearest the land. In such cases, however, the State agent must file with the testimony his own affidavit also, stating the absence, want of information, or refusal, on the part of the first-named witnesses herein required, to testify, or of the non-occupancy of the land, and that the persons whose testimony he offers are the nearest well-informed residents to the premises.

The depositions may be taken before any officer authorized by law to administer oaths: *Provided*, That if taken before an officer other than the clerk of a court of record having a seal, the official character of such officer shall be established by the certificate of the clerk of the proper court of record under the official seal thereof.

In all cases the disinterestedness of the witnesses as to the matter in issue must be established under oath, and the credibility of such witnesses must be certified to by the officer taking the depositions, or established by the oath of witnesses to whose credibility he certifies.

WILLIS DRUMMOND,  
*Commissioner.*

DEPARTMENT OF THE INTERIOR, *March 21, 1872.*

Approved:

C. DELANO,  
*Secretary.*

#### 10. MORASS LANDS ON LITTLE CALUMET RIVER.

The morass lands lying along the Little Calumet River, in township 36 north, of range 8 west, of the 2d principal meridian, Indiana, were surveyed under the act of Congress approved July 1, 1870, entitled "An act in relation to certain unsold lands in the counties of Porter and Lake, in the State of Indiana," (United States Statutes, vol. 16, page 187.) In accordance with the provisions of that act, the register and receiver of the district land office at Indianapolis were instructed to



offer the lands for sale to the highest bidder, subject to a lien in favor of the Calumet Draining Company under the laws of the State of Indiana.

The district officers have reported the offering and sale of these lands, amounting to 2,808.83 acres, and for the aggregate sum of \$4,304.72.

#### 11. USELESS MILITARY RESERVATIONS.

The act of Congress approved February 24, 1871, provided for bringing into market the lands embraced in certain useless military reservations, as follows :

	Acres.
Fort Lane, Oregon, estimated area.....	640
Fort Walla-Walla, Washington Territory, estimated area.....	1,920
Fort Jesup, Louisiana, estimated area.....	6,400
Fort Sabine, Louisiana, estimated area.....	18,200
Fort Wayne, Arkansas, estimated area.....	11,680
Fort Smith, Arkansas, estimated area.....	.....
Fort Zarah, Kansas, estimated area.....	3,068
Fort Abercrombie, Minnesota, estimated area.....	6,993
	Square miles.
Camp McGarry, Nevada, estimated area.....	75
Fort Sumner, New Mexico, estimated area.....	21½

and so much of Fort Bridger, Wyoming, as may be no longer required for military purposes.

The condition of this matter was fully stated in my last annual report, (page 25,) showing the steps taken in pursuance of the provisions of said act.

In the absence of an appropriation to pay the necessary expenses to be incurred, further action has been suspended.

#### 12. EDUCATIONAL LAND BOUNTY.

The lands granted in the States and reserved in the Territories for educational purposes by acts of Congress are estimated in the aggregate at 79,506,794 acres, embracing—*First*, for common schools, every sixteenth section of public land in the States admitted prior to 1848, and every sixteenth and thirty-sixth section of such land in States and Territories since organized; *Second*, the quantity of two townships, or 46,080 acres, in each State or Territory containing public land, and in some instances a greater quantity, for the support of seminaries or schools of a higher grade; and *Third*, the grant to all the States for agricultural and mechanic colleges, by act of July 2, 1862, and its supplements of 30,000 acres for each Representative and Senator in Congress to which the State was entitled, of land "in place" where the State contained a sufficient quantity of public land subject to sale at ordinary private entry at the rate of \$1.25 per acre, and of scrip representing an equal number of acres where the State did not contain such description of land, the scrip to be sold by the State and located by its assignees on any such land in other States and Territories, subject to certain restrictions.

The first-mentioned grant, being of specified sections, becomes effective as soon as the lines of survey are run, marking out and determining the particular sections, without further action on the part of the Department. Where, however, the land covered by the granted sections is found on survey to be embraced in prior adverse claims, or the sec-



tions are deficient, other lands are to be selected as indemnity therefor, of equivalent area, under the acts of Congress approved May 20, 1826, and February 26, 1859.

During the last fiscal year there have been so selected, and the selections approved and certified to the State authorities, 134,615.73 acres of indemnity school lands.

During the same period, the quantity selected, approved, and certified for seminary purposes amounted to 26,003.07 acres.

Under the grant for agricultural and mechanic colleges, there were selected, approved, and certified, during the fiscal year, of lands "in place," 17,316.77 acres, while the locations of scrip reached the aggregate of 693,613.37 acres.

During the fiscal year scrip was issued to the States of Georgia and Mississippi, under the last-mentioned grant, representing 480,000 acres, leaving two States only, Arkansas and Florida, to which the scrip has not yet been issued under the law.

In adjusting this branch of the public business, careful examination and much clerical labor and correspondence are required, adding largely to the duties of the office.

### 13. RAILROADS.

In my last annual report I referred to the progress made in the construction of the several railroads in the Western States and Territories, to aid which Congress has made large donations of lands to the States and companies interested.

The last fiscal year shows no abatement in the energy with which these important enterprises have been prosecuted; on the contrary, more miles of these roads have been constructed within that period than during any preceding year.

The Northern Pacific road, which is intended to form the connecting link between Lake Superior and the Pacific Ocean, has been completed from its present eastern terminus on the lake to a point near the Big Bend of the Missouri River, a distance of about five hundred miles westward, through the State of Minnesota and the greater part of the Territory of Dakota. The company is also constructing its road eastward from the western end in Oregon.

The Saint Paul and Pacific and the Sioux City and Saint Paul roads, grantees of the State of Minnesota under the congressional act of March 3, 1857, and subsequent acts, have fully completed their roads; the former connecting Saint Paul and the east with the Red River of the North, which forms the western boundary of Minnesota, and the latter uniting the flourishing cities of Saint Paul, Minnesota, and Sioux City, Iowa.

The construction of the Winona and Saint Peter road, running from Winona, Minnesota, westward to the Big Sioux River, in Dakota Territory, is being prosecuted with energy; official information having been received of the construction of forty miles since my last report. When this road is completed, all the roads and branches for which the grant of March 3, 1857, provided aid, will have been constructed.

In Wisconsin, the Tomah and Lake Saint Croix Railroad, now known as the "Western Wisconsin," connecting the towns of Tomah and Hudson, has been fully completed; and the Wisconsin Central, extending from Portage City by way of Stevens's Point northward to Bayfield, is being rapidly constructed. The grant for these roads was made by act of Congress approved May 5, 1864.



The Chicago and North Western Railroad, aided by the act of June 3, 1856, and having authority by subsequent legislation to change its line, is nearly completed, and when fully finished will unite Fond du Lac, on Lake Winnebago, Wisconsin, with the town of Menomonee, at the mouth of the Menomonee River, (a point distinguished for its large lumber interests,) and, by a connecting line in Michigan, with Esconawba, in the latter State. The same progress is noted in Michigan; and in Kansas all the land grant roads have been completed, except the Atchison, Topeka and Santa Fé Railroad. This railway is so near completion that its officers confidently expect to reach the western boundary of the State before the expiration of the present year. When finished, the road, starting from Atchison, will pass through Topeka, the capital of the State, thence to Emporia, and thence by a western course to the big bend of the Arkansas River, and following that river will reach the western boundary near the southwest corner of the State. The country traversed by the western half of this road is noted for its fine grazing qualities, and is peculiarly adapted to the wants of stock raisers and herdsmen.

The Missouri, Kansas and Texas Railroad, aided by the act of July 26, 1866, having completed its line from Junction City down the valley of the Neosho River to the southern boundary of the State of Kansas, has since been constructed nearly through the Indian Territory, with a view to making a connection with Galveston, Texas.

The Leavenworth, Lawrence and Galveston road, (act 3d March, 1863,) extending from Lawrence south to Thayer, and the Kansas and Neosho Valley road, (act July 25, 1866,) from Kansas City, Missouri, to Baxter Springs, Kansas, are both completed. The country traversed by these roads embraces some of the most fertile and thickly settled lands of the State of Kansas.

In Nebraska, the Union Pacific, long since completed, traverses the State from east to west, and the Burlington and Missouri River road, just now completed, affords accommodations to that part of the State south of the Platte River, and by its connection with the former road at or near Fort Kearney forms one of the many lines connecting Chicago and the eastern cities with the Pacific States.

In Iowa all the land grant roads have been completed except the McGregor and Missouri River road, and it is so far advanced as to justify the belief that it will be finished within the time fixed by law.

The Atlantic and Pacific road, which constitutes one of the routes to the Pacific Ocean, has constructed its line from Springfield, Missouri, the eastern initial point, into the Indian Territory, and the company has filed maps indicating the line of the road through the remainder of that Territory, following the Canadian River; the road runs thence through New Mexico and Arizona to the Colorado River at a point near Fort Mohave. Maps have been also filed designating a line from San Francisco, California, up the valley of the Salinas River, and thence eastward with a view to a connection with the eastern part of the line at Colorado River.

In Oregon the Oregon and California road has been constructed southward toward the boundary of the State for the purpose of connecting with the California and Oregon road of California, which is being built northward toward the same boundary; when completed these lines, both aided by the same congressional act, will form a continuous road from Portland, Oregon, to the Central Pacific Railroad of California, thus uniting the Northern and Central Pacific roads, and giving railroad facilities to Northern California and Western Oregon. Work is



being prosecuted also on the roads in Michigan, Alabama, Arkansas, Louisiana, Florida, and Mississippi. During the year I have received official reports showing the construction of 1,743 miles of road, as follows: Michigan, 70 miles; Wisconsin, 56 miles; Iowa, 233 miles; Minnesota, 364 miles; Kansas, 217 miles; Nebraska, 191 miles; Arkansas, 145 miles; Alabama, 100 miles; Mississippi, 95 miles; Oregon, 60 miles; California, 20 miles; Indian Territory, 86 miles; and Colorado Territory, 106 miles; and have certified or patented to the several roads entitled thereto, under acts of Congress, 3,554,887.58 acres of lands, as will more fully appear by a tabular statement attached to this report.

The Department, in construing certain acts of Congress making grants of lands to railroads, but exempting therefrom tracts to which a pre-emption or homestead right had attached, having decided that such tracts reverted to the Government upon the subsequent cancellation of the pre-emption filing or homestead entry, the question arose as to what constituted such right, and it was held that unless the claim was legal in its inception and not forfeited by abandonment at the time the grant became effective, the lands inured to the benefit of the grantees, and did not revert to the Government.

#### 14. OPERATIONS UNDER THE MINING STATUTES.

##### *Conflict between mineral and agricultural land claimants.*

Mineral lands being excluded from the operations of the pre-emption, homestead, and other agricultural land laws of Congress, the equitable adjustment of rights in districts containing both mineral and agricultural lands has been attended with great difficulty; the two classes of lands in many instances being so intermingled as to render their segregation by the ordinary rectangular system of public land surveys an absolute impossibility, a condition of things resulting in numerous false returns by deputy surveyors and fraudulent entries of mineral lands under laws expressly limited to lands not mineral.

The complications involved in dealing with this question, as well as the precautions found necessary to be adopted in some districts to prevent the illegal absorption of large tracts including mines and minerals, under laws only applicable to *non-mineral* lands, will be the more fully comprehended by a perusal of the following correspondence and instructions:

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., November 24, 1871.

SIR: I have the honor to represent that, prior to the date of my taking charge of this office, the practice prevailed of allowing pre-emption and railroad rights to attach to lands in the mineral region, when the same were returned by the surveyors as agricultural land, without making an investigation as to the correctness of such return, unless affidavits were filed alleging the tracts to be mineral.

As an evidence of the evil results of this course, I would invite your attention to the following case, now before this office, viz:

The official plat of survey of township 1 north, range 1 east, Mount Diablo meridian, California, was approved by the surveyor general June 12, 1867. The southeast quarter of section 19 of said township fell within the limits of the withdrawal for the Western Pacific Railroad Company, and not being returned as mineral, passed to said company by patent dated May 31, 1870.

On the 26th January, 1871, Joshua Marsh made an entry of this tract at the San Francisco land office, after notice; he claimed the possessory right thereto under mining laws by reason of his being the owner of a mine of cinnabar therein, located in June, 1864, upon which he had expended more than \$1,000.

By reason of this erroneous return, a patent has thus been issued conveying what appears to be valuable mining premises; which never would have been done had the land been properly returned by the surveyor, the grant to said company expressly excepting and excluding all mineral lands except those containing coal or iron.



I am impressed with the conviction that it is neither in harmony with the spirit or intent of the laws of Congress, nor with true public policy, to sanction the indiscriminate absorption of the lands in what has heretofore been known as the reserved mineral belt in the public domain, under laws only applicable to lands clearly non-mineral, simply because the deputy surveyors failed to return the same as mineral in character.

This view is strengthened by the fact that very many, in fact the majority, of the applications for mineral patents are found, upon consulting our official township plats, to be within subdivisions not reported as mineral in character.

In many of the hearings had before the local officers to determine the true character of these tracts, the testimony shows conclusively that of a whole quarter or half-quarter section sought to be entered under the pre-emption law, the only portion really agricultural in character is confined to two or three acres upon which the pre-emption party has a house and garden, the agricultural utility of the remainder consisting in its adaptability to grazing cattle.

The mere fact that an individual uses one of these isolated garden spots, situate in an imperfectly developed mineral region, as a homestead or ranch, does not, it is thought, invest him with an equitable right to a Government title to an entire quarter section of land, the real mineral character of which has not yet been tested, or, at all events, not sufficiently to enable parties to tell with any certainty whether the land contains valuable mines or not.

The Government is not in such haste to divest itself of its title to the lands situate within the heretofore reserved mineral region, as to grant them away by wholesale as agricultural lands, before they have been sufficiently explored to determine their true character.

Such policy would result in the exclusion of other citizens of the United States who might desire to exercise their legal right to explore and occupy mineral lands in the public domain.

When a *bona fide* agricultural claimant desires the segregation of the ground containing his improvements from the adjoining mineral land, he can have the same effected under existing circular instructions.

From the fact that but few of these pre-emption claimants seem disposed to avail themselves of the privilege of this segregation, the inference is that in many cases it is not so much on account of the agricultural value of the tract as of its probable mineral deposits that title is desired.

Speaking of Nevada County, California, J. Ross Browne, in his official report made March 5, 1868, to the Secretary of the Treasury, says:

"Its length, from east to west, is about sixty-five miles, having an average breadth of twenty, and containing about one thousand three hundred square miles. It is near the middle of the great gold region that stretches along the westerly slope of the mountain chain, extends entirely across the auriferous belt, and in the last nineteen years has produced more gold than any tract of country of equal extent in the world."

Referring to the extent of the placer mines in said county, this report states:

"The product of the placer mines of Nevada County has neither materially increased nor diminished since 1850, and though they have been worked without interruption for nineteen years, the developments of that period have barely been sufficient to give us an idea of their vast extent. The shallow diggings which were so easily worked and afforded such large returns to the early miners are mostly exhausted; but the deep placers, or hill diggings, in the channels of ancient streams, in many places underlying hundreds of feet of alluvial deposits and volcanic material, cannot be exhausted for a long period of time. In fact, for all practical purposes, they may be considered as inexhaustible."

Again, on page 127 of said report, it is stated:

"No estimate approaching to accuracy can be made of the amount of gold contained in the placer mines of this county, and which yet may be brought forth for the benefit of the civilized world. To say that it is enough to pay off the national debt would be a moderate estimate, and it is not improbable that in some of these deep placers deposits of gold may yet be found in such quantities as will materially diminish the value of the metal."

The same work gives exhaustive statistics of the extent and value of the gold-bearing quartz ledges in said county, those in the Grass Valley mining district being described as the most valuable in California.

Township 16 north, range 8 east, Mount Diablo meridian, embraces the towns of Grass Valley, Gold Hill, and part of Nevada City, all in the very heart of this rich mining region, and yet, upon inspecting the official plat of said township, approved by the surveyor general August 24, 1867, it is found that no particular portions of the land are returned as mineral and segregated from the agricultural portion, as required by the law and instructions. Since the survey and return of said township, numerous contests have arisen between miners and pre-emption claimants as regards the character of the land, and several applications have been made and titles issued for mines therein, no intimation of the existence of which was given, however, upon the official



plat of said township aforesaid; for instance, the celebrated Eureka gold quartz claim, reported by J. Ross Browne to have been worked since 1851, and to be "the most valuable gold mine in the county, or perhaps in the world," yielding about \$49,000 per month, is situate in the northeast quarter of section 26 of said township, which said tract is not shown by the plat aforesaid to contain any mineral land or claim whatever.

The widely known Ophir Hill, or Empire mine, near the town of Grass Valley, is in section 35 of said township. This mine has been worked since the year 1852, has had \$250,000 expended in improvements thereon, and is reported to have yielded nearly \$2,000,000 in gold; yet said plat gives not the slightest indication that there is any such mine in existence, or that the subdivision in which it lies is other than agricultural land.

Numerous other cases of this kind could be cited, not only in Nevada, but in other of the mining counties, of tracts being returned agricultural in character, while, as was subsequently shown, there were valuable mines thereon in active operation at the time the survey was made.

Again, in some of the township plats, certain of the subdivisions are shaded yellow, and designated "mineral land," the remainder being designated "agricultural land." Inspecting some of these plats, it is found that within these "agricultural" tracts are marked "quartz ledges," "placer mines," "hydraulic mines," &c., the plat thus contradicting itself.

Prior to the 26th of July, 1866, the date of the passage of the mining statute, this mineral region had been excluded from survey and sale by the laws of Congress.

Under the tenth section of said statute it is provided—

"That wherever, prior to the passage of this act, upon the lands heretofore designated as mineral lands, which have been excluded from survey and sale, there have been homesteads made by citizens of the United States or persons who have declared their intention to become citizens, which homesteads have been made, improved, and used for agricultural purposes, and upon which there have been no valuable mines of gold, silver, cinnabar, or copper discovered, *and which are properly* agricultural lands, the said settlers or owners of such homesteads shall have a right of pre-emption thereto, and shall be entitled to purchase the same at the price of one dollar and twenty-five cents per acre, and in quantity not to exceed one hundred and sixty acres, or the said parties may avail themselves of the provisions of the act of Congress approved May twenty, eighteen hundred and sixty-two, entitled 'An act to secure homesteads to actual settlers on the public domain,' and acts amendatory thereof."

The eleventh section of said mining statute provides—

"That upon the survey of the lands aforesaid, the Secretary of the Interior may designate and set apart such portions of the said lands as are *clearly agricultural* lands, which lands shall thereafter be subject to pre-emption and sale, as other public lands of the United States, and subject to all the laws and regulations applicable to the same."

From the indefinite nature of the returns made by the deputy surveyors, the impracticability of carrying into effect this eleventh section becomes at once apparent, experience having shown that little reliance is to be placed upon these plats in determining the true character of the land.

To set apart the lands "clearly agricultural," from such *data*, partakes more of the nature of guess work than anything else for the reason, as has been set forth, that some of the lands containing valuable mines are not returned as mineral.

Public considerations of a high character, therefore, induce me to ask authority for withdrawing from disposal as agricultural lands such townships or parts of townships, in this region, as may reasonably be presumed from common report, from official and other *data*, to be properly classed as mineral lands, and that no entries thereof be permitted except by legally qualified citizens holding mineral claims, in accordance with the mining statute, except in cases where the agricultural character shall first be established by competent testimony, in accordance with existing regulations applicable to the subject.

I am, sir, very respectfully, your obedient servant.

WILLIS DRUMMOND,  
*Commissioner.*

Hon. COLUMBUS DELANO,  
*Secretary of the Interior.*

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DEPARTMENT OF THE INTERIOR,  
Washington, D. C., November 24, 1871.

SIR: In reply to your letter of this date, requesting authority to withdraw from disposal as agricultural lands certain townships or parts of townships in the mineral re-



gion, which have been surveyed and returned as agricultural land, but which are believed to be mineral in character, I have to state that, upon an examination of the subject, I fully concur in your views, and you are hereby authorized to make the necessary withdrawal, and to instruct the local officers not to permit any of the tracts which may be withdrawn to be entered as agricultural land, unless the *non-mineral* character of the same shall have been first fully and clearly established by competent testimony.

Very respectfully, your obedient servant,

C. DELANO, *Secretary.*

Hon. WILLIS DRUMMOND,  
*Commissioner of the General Land Office.*

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
*Washington, D. C., December 2, 1871.*

GENTLEMEN: Under the authority of the honorable Secretary of the Interior, you are hereby directed to withhold the lands in the following designated townships in your district from disposal under laws only applicable to agricultural land, until the *non-mineral* character of the same shall have first been satisfactorily established at a hearing to be had before you after due notice in manner set forth in circular herewith of date the 6th May, 1871. This course has been forced upon the Department by several circumstances, among which may be cited the fact that the majority of applications for mining titles from California are for lands marked "agricultural" upon the official township plats; that in making these returns of surveys large areas in the heretofore reserved mineral belt are marked on the plats as "agricultural lands," while upon the same plats, and within the tracts so returned as agricultural, are annotations of "quartz ledges," "mining ditches," "hydraulic mines," "diggings," &c., the plat thus contradicting itself and leaving this office ignorant as to the true quality of the land.

In a case now pending before this office of an application for patent for a quicksilver mine, one which has been worked for years, it is found that the land was returned as agricultural, and falling within the limits of the grant, was patented to the Western Pacific Railroad Company before said application was received.

Experience having shown that this office cannot with any degree of safety judge of the character of these lands from the *data* furnished by such returns, and there being no authority of law for the employment of a competent geologist to investigate the matter, the head of the Department has, in consideration of the public interests, and to prevent the indiscriminate absorption of the mineral lands of the public domain through the instrumentality of insufficient returns, found it imperatively necessary to adopt the course herein announced, both for the protection of the parties who have already expended time, capital, and labor in opening and developing mines, and those of the citizens of the United States who may hereafter desire to exercise their legal right to do so.

The following designated townships within your district come within this order, viz:

Township 1 north, ranges 12, 13, and 14 east.

Township 2 north, ranges 11, 12, 13, 14, and 15 east.

Township 3 north, ranges 10, 11, 12, and 13 east.

Township 4 north, ranges 10, 11, 12, and 13 east.

Township 5 north, ranges 10, 11, and 12 east.

Township 6 north, ranges 10, 11, 12, and 13 east.

Township 7 north, ranges 9, 10, 11, and 12 east.

Township 8 north, ranges 9, 10, 11, and 12 east.

Township 9 north, ranges 9, 10, 11, and 12 east.

Township 10 north, ranges 8, 9, 10, 11, and 12 east.

Township 11 north, ranges 6, 7, 8, 9, 10, and 11 east.

Township 12 north, ranges 6, 7, 8, 9, 10, and 11 east.

Township 13 north, ranges 6, 7, 8, 9, 10, and 11 east.

Township 14 north, ranges 7, 8, 9, 10, and 11 east.

Township 15 north, ranges 7, 8, 9, 10, and 11 east.

Township 16 north, ranges 7, 8, 9, 10, 11, 12, 15, 16, and 17 east.

Township 17 north, ranges 16 and 17 east.

Township 18 north, ranges 16 and 17 east.

Township 19 north, ranges 16 and 17 east; all Mount Diablo base and meridian.

You will at once acknowledge the receipt hereof, and be governed accordingly.

Very respectfully, your obedient servant,

WILLIS DRUMMOND,  
*Commissioner.*

REGISTER AND RECEIVER,  
*Sacramento, California.*



DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., December 7, 1871.

GENTLEMEN: Under authority of the honorable Secretary of the Interior, you are hereby directed to withhold from disposal as agricultural the lands in the following designated townships in your district, until the *non-mineral* character of the same shall have first been established at a hearing to be had before you after due notice in the manner set forth in the accompanying circular instructions of May 6, 1871. This course has been forced upon the Department by several circumstances, among which may be cited the fact that the majority of applications for mining titles from California are for lands not marked "mineral" upon the official township plats; that in making these returns of surveys, large areas in the heretofore reserved mineral belt are marked upon the plats as "agricultural lands," while upon the same plats, and within the tracts so returned as agricultural land are annotations of "quartz ledges," "mining ditches," "hydraulic mines," "diggings," &c., the plat thus contradicting itself and leaving this office in ignorance as to the true quality of the land.

In a case now pending before this office of an application for patent for a quicksilver mine which has been worked for years, it is found that the surveyor failed to mark the land as mineral, and the tract falling within the grant was patented to the Western Pacific Railroad Company, before said application was received.

Experience having shown that this office cannot with any degree of safety judge of the character of these lands, whether mineral or agriculture, from the *data* furnished by such returns, and there being no authority of law for the employment of a competent geologist to investigate the matter, the head of the Department has, in consideration of the public interests, and to prevent the indiscriminate absorption of the mineral lands of the public domain through the instrumentality of insufficient returns, found it imperatively necessary to adopt the course herein announced, both for the protection of those who have already expended time, capital, and labor in opening and developing these mines, and citizens who may hereafter desire to exercise their legal right to do so.

The following designated townships in your district come within this order, and you will treat the same as if returned as mineral lands until the non-mineral character is disproved, unless otherwise directed by this office, viz:

Township 1 north, ranges 11, 12, 13, 14, and 15 east.  
Township 2 north, ranges 11, 12, 13, 14, and 15 east.  
Township 3 north, ranges 10, 11, 12, and 13 east.  
Township 1 south, ranges 12 and 14 east.  
Township 4 south, range 16 east.  
Township 5 south, ranges 16 and 17 east.  
Township 6 south, range 18 east.  
Township 7 south, ranges 17 and 18 east.  
Township 8 south, range 18 east.  
Township 9 south, range 18 east.  
Township 10 south, ranges 20 and 22 east.  
Township 11 south, ranges 22 and 23 east; all Mount Diablo meridian.

Please acknowledge receipt hereof as "N."

Very respectfully,

WILLIS DRUMMOND,  
Commissioner.

REGISTER AND RECEIVER,  
Stockton, California.

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., January 22, 1872.

GENTLEMEN: Under the authority of the honorable Secretary of the Interior, you are directed to withhold the lands in the following designated townships from disposal as agricultural lands until the *non-mineral* character thereof shall have first been fully established at a hearing to be had before you in accordance with circular instructions herewith, dated the 6th May, 1871, viz:

Township 14 north, range 6 east.  
Township 15 north, range 6 east.  
Township 16 north, ranges 5 and 6 east.  
Township 17 north, ranges 5, 6, and 7 east.  
Township 18 north, ranges 4, 5, 6, and 7 east.  
Township 19 north, ranges 3, 4, 5, 6, and 7 east.  
Township 20 north, ranges 3 and 4 east.



Township 21 north, ranges 3 and 4 east.

Township 22 north, range 3 east.

Township 23 north, range 3 east.

Township 24 north, range 4 east; all Mount Diablo meridian.

Please to acknowledge the receipt hercof at once as "N."

Very respectfully, your obedient servant,

WILLIS DRUMMOND,  
Commissioner.

REGISTER AND RECEIVER,  
Marysville, California.

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., March 11, 1872.

SIR: In a communication to you of 24th November last, this office submitted a statement as to the prevailing mode of disposing of lands in the mineral regions of the United States, which, prior to the date of the mining act of 26th July, 1866, had been carefully reserved by Congress from survey and sale, and after reciting the leading facts as to the inadequate protection of the public interests in these lands, in view of the uncertain character of the returns made by surveyors, requested authority for suspending the disposal of certain lands as agricultural in character until competent proof was furnished that the same were non-mineral.

On the same date you gave this office the necessary authority to make such suspension and to instruct the local land officers not to permit the agricultural entry of any tract so withdrawn until its non-mineral character is first shown by competent testimony.

This office accordingly suspended for non-mineral proof a number of townships within what is commonly known as the "mineral belt" in California, and also a number in the Central City land district, in Colorado Territory.

This action has created much acrimonious discussion, *pro* and *con*, especially in California; the newspapers in some cases totally misapprehending, as it would appear, the real meaning and object intended to be conveyed and effected by the order, by regarding it in the light of a suspension of the lands in question from settlement, and a denial *in toto* of the right of any settler to secure title to any tract whatever within the suspended townships, omitting, however, to explain that upon making proof of the non-mineral character of any tract so suspended, the settlers' rights would be fully recognized.

Other journals, especially those published in the mining districts, where the real question at issue is more thoroughly understood, readily admitted the propriety of the order, at the same time regretting the additional expense necessarily incurred by *bona fide* agricultural claimants in establishing the non-mineral character of their claims.

The Hon. A. A. Sargent, member of Congress from California, has referred to this office several letters from constituents of his in the mining counties, complaining of the additional expense and delay to which they are subjected by reason of being required to prove that their lands are not mineral before being allowed to receive patents therefor, and asking a revocation of the order requiring such proof where the land claimed is not returned by the surveyor as mineral, or upon which affidavits have not been filed alleging the same to be mineral in character.

Mr. Sargent fully indorses such request, and recommends that said orders be rescinded, holding that by the system of mineral affidavits all known mineral lands are declared to be such; to all of which this office has given that careful and respectful consideration demanded by the importance and magnitude of the interests involved.

Congress has from its earliest legislation in reference to public lands made a distinction between lands which are mineral and those which are not, and this distinction has invariably been enforced in every public land law enacted by that body up to the present time, and so long as the legislative branch of the Government sees fit and proper to specially make such distinction, the executive has before it the plain duty of enforcing the same, and is without power under the law to waive it.

As recited in my previous communication to you upon this subject, the law of Congress approved July 26, 1866, provides, among other things, for the extension of the public surveys to this reserved mineral region, recognizes homestead and pre-emption rights to lands therein *not mineral*, and requires the Secretary of the Interior to set apart such portions as are "*clearly agricultural*," to be thereafter subject to disposal as other lands of that class. It is clear from the language of this statute that Congress did not intend to abolish or do away with the distinction between mineral and agricultural lands, or to allow mineral lands to be classed and disposed of as agricultural; but it simply provided that the public surveys might be extended over a region that



was so clearly mineral in character, that before that time it had been all reserved for mineral purposes, and the tract that should appear to be *clearly agricultural* and set apart for disposition under the laws relating to such lands, while the mineral lands should be still reserved for disposition under the laws relating to lands of that class, this Department having no more right to dispose of mineral lands in large tracts than it had before the enactment of this law.

Owing to the fact that the two classes of land in the mineral belt are so interlaced as to prevent, in most cases, their segregation by the rectangular system of surveys, the proper execution of this requirement of setting apart the "*clearly agricultural*" portions is one of the greatest difficulty, and in many cases it is almost impossible.

During the lapse of ages the melting of snows and washing of rains have had the effect of disintegrating the quartz lodes or other auriferous deposits in the mountains, which are washed down into the valleys, flats, and ravines, the gold, from its greater specific gravity, settling to the bottom or bed-rock, these deposits forming the "placers" or "diggings," some of which are quite shallow and soon exhausted; others again being very deep and overlaid with good soil, the surface in the latter case being "*clearly agricultural*," while the deposit underlying the same is of such a character as to render the land of great value for mineral.

Again, there exists in the State of California what are called "blue leads," "cement," or "gravel" claims, supposed to be the beds of ancient river channels, very deep, rich in gold, and practically inexhaustible. These immense deposits are frequently covered to a depth of from fifty to one hundred feet, the surface of the overlying mass being, perhaps, tillable land, and presenting no indication whatever of the valuable underlying deposit.

Arable land is also sometimes found to overlies quartz lodes, the existence of which may not have been known at the time the settler began his improvements, but were afterward discovered, by prospecting shafts or otherwise, by miners, who thereupon claimed such lodes under local rules and customs, together with a sufficient area of surface ground for the convenient working of such mines.

But, aside from the obstacles growing out of the peculiar character of the lands, which render it very difficult, even with the utmost circumspection and care, to carry out the intention of Congress and prevent the disposition of mineral lands as agricultural, I have found that, owing to the grossly careless, not to say fraudulent, manner in which deputy surveyors execute their work in the field and make their returns, the distinction which Congress had drawn between agricultural and mineral lands was not observed, and whole townships of the richest mineral land in the world, including well known mines which had been worked successfully for years, and which were still being worked successfully and profitably, were returned to this office and to the local land offices as agricultural land, and so posted on the tract books, and became, from the date of such return, subject to sale and to selection by railroads, &c., as agricultural lands, in direct violation of the plain intent of Congress as expressed, not only in previous legislation, but in the very act under which these lands were surveyed and brought into market.

Therefore, the action taken by this office, in requiring agricultural claimants to submit satisfactory proof as to the non-mineral character of the lands sought to be entered by them, was not only imperatively necessary to carry out the will of Congress, clearly and repeatedly expressed in regard to the reservation of mineral lands for mineral purposes, and their disposition in a special manner, but had this office, after the discovery of the fact that the plats and returns made by surveyors were incorrect and false, continued to act on and follow them in the disposition of these lands, it would not only have been guilty of the grossest and most inexcusable neglect of duty, but it would have knowingly violated the law and become a party to the frauds perpetrated by its subordinates.

To illustrate the unreliability of the surveyors' returns as to the character of these lands, and the absolute necessity for the rule which, with your advice and consent, I have adopted, it may be proper to refer, in this connection, to some of the applications for patents for mines in California, the lands embracing which were returned on the official township plats as agricultural in character, the existence of mines therein not becoming known to this office until after the receipt of such applications for mining titles, viz: Schofield gold quartz claim, Eureka gold quartz claim, Idaho gold quartz claim, Pittsburgh gold quartz claim, Empire gold quartz claim, Sebastopol gold quartz claim, Auroral Star gold quartz claim, Galena gold quartz claim, Spring Hill gold quartz claim, New York Hill gold quartz claim, Hanson gold quartz claim, Slate Ledge gold quartz claim, Norambanga gold quartz claim, Rising Sun gold quartz claim, Medean gold quartz claim, Providence gold quartz claim, Davidson quartz claim, Union Company's quartz claim, Dry Creek quartz claim, Sutherland quartz claim, Simpson & Aden quartz claim, Fort John quartz claim, Henry Dyer *et al.*'s placer claim, William Odgers *et al.*'s placer claim, F. C. Lentje *et al.*'s placer claim, Henry Layton's placer claim, George Grant *et al.*'s placer claim, Bradwell & Hoag's placer claim, Daniel R. Carson's placer claim, Albert L. Lamb's placer claim, Sargent & Jacob's placer



claim, Robert Nelson's placer claim, Byrne & Walker's placer claim, N. Reinhold *et al.*'s placer claim, William Barney's placer claim.

The foregoing claims are all within the Sacramento district, and many more could be enumerated were it necessary to illustrate the want of reliability of the surveyors' returns as to the character of lands. The surveyors general were specially instructed to direct their deputies in the field to report the character of these lands, giving, in addition to other specified *data*, information respecting any and all coal beds, minerals, or ores, with particular descriptions of the same as to quality and extent, and all diggings therefor, &c., and to designate the agricultural portions upon the official plats, to the end that the section of law requiring the Department to discriminate between the two classes of land might be properly executed; but, with the kind of returns furnished, it is totally impossible to determine whether any given tract in the mineral district is properly agricultural land, within the meaning of the law, or not, or whether this office could, with a due regard for the execution of the law, proceed to patent such tract as agricultural land without further investigation.

Hon. T. A. Hendricks, in a recent personal call at this office, requested permission to examine the official plat of township 20 north, range 4 east, Mount Diablo meridian; he being, with others, largely interested in mines in section 29 of that township.

He stated, from personal knowledge of the land, that what is called Table Mountain runs northerly and southerly in said township; that it is very abrupt and precipitous, about half a mile in height, and perhaps two miles wide, being extensively mined for its underlying gold bearing cement deposits, which are of immense extent and value, but difficult to work for want of water; that he with others is engaged in constructing a ditch or flume at an expense of \$150,000, for the purpose of bringing water to work their claims in said section 29; that Morris Ravine, in said section, had already yielded about \$2,000,000, but would not be exhausted in one hundred years, &c.

Upon examination of the plat of this township, there was found nothing to show the existence of Table Mountain; none of the land stated by Mr. Hendricks to be so rich in mineral having been returned or posted upon our books as other than agricultural land.

Under my predecessor, the rule prevailed that upon the survey of these reserved lands, homesteads, pre-emptions, and railroad grant rights took effect upon all such lands as were returned by surveyors as "agricultural," except in cases where, before such lands were patented, affidavits were filed alleging their true character to be mineral, in which case a hearing would be had before the register and receiver, to determine whether the tract was of more value for mineral than for agricultural purposes, mineral lands being expressly excluded from land grants to railroads, and from the operation of the pre-emption or homestead laws. But I am fully convinced that this rule failed to afford adequate protection to the miners as a class, or prevent the disposition of mineral lands as agricultural. It is true that parties engaged in the real estate business or in land speculations, and who are therefore well informed as to the regulations governing the land offices, and also those miners who have acquired a knowledge of the reckless manner in which returns have been made by deputy surveyors, can protect themselves from the consequences of such erroneous and false returns, by making affidavits as to the mineral character of the lands in which they are directly interested, and filing the same with the register and receiver, thus necessitating a hearing before the land so filed on can be disposed of as agricultural; but, inasmuch as the law does not provide for or require such affidavits to be filed, but does authorize the Secretary of the Interior, when the surveys are made, to segregate the agricultural from the mineral lands before they can be classed or disposed of under the law relating to agricultural lands, the miners and owners of mining claims have a right to suppose, and the great mass of them did undoubtedly suppose, that they were protected by the law without action on their part; but if this were not so, I fail to perceive any good reason why, in a region confessedly mineral, and in which Congress has seen proper to hold all lands as mineral, except those specially designated as agricultural by the Secretary of the Interior, the burden of filing proof as to the character of the land should be imposed on the mineral instead of the agricultural claimant. If a mine should be discovered in a region where agricultural lands predominate, such a rule would be reasonable and proper, but in a mineral region the burden of proof should be on the agricultural claimant, and Congress has, in the matter under consideration, so provided in effect by considering and treating all the lands as mineral which have not been specially designated by the Secretary of the Interior as agricultural. It will be observed that the work of designating and setting apart agricultural lands in the mineral region is not left to the surveyor general, or even to the Commissioner of the General Land Office, but is by the statute thrown upon the Secretary of the Interior, and, therefore, according to the most liberal construction we can place upon the law, the disposition of these lands as agricultural, under the rule prescribed by my predecessor, was unauthorized and clearly illegal.

But if we admit the propriety and legality of the proceedings under these mineral affidavits, they do not prevent the mineral lands from being disposed of as agricul-



ural, except in special cases where contests arise between parties claiming adversely. Where the mineral and agricultural interests are both vested in the same person or persons, the lands will be taken as agricultural, unless the parties in interest are required to give notice and submit proof under oath as to the non-mineral character of the land.

Again, in many localities the mineral bearing lands have not heretofore been occupied or worked, because of the lack of water or other necessary facilities, but it does not follow, because they are not at present occupied or worked by some one who is ready to contest the right of the agricultural claimant, that they are not mineral lands, or that they may not, under a changed condition of things, become as productive as any mines in the country. A ditch, of a few miles in length, frequently renders mines very profitable, that could not be worked successfully without water.

But I have shown that there is no law which authorizes or requires these mineral affidavits, and there is nothing to prevent them from being withheld or withdrawn for fraudulent purposes.

In some cases, when the matter came on for hearing before the register and receiver, the mineral affiants failed to appear, and instances have come to the knowledge of this office of private arrangements being entered into between the respective mineral and agricultural claimants, by which the latter were not to be opposed in obtaining titles to the land, which, upon being patented as agricultural, was to be held by the several parties in pursuance of such previous agreement, and thus the only obstacle to the disposition of mineral lands as agricultural—the mineral affidavit—was withheld or removed.

In view of the facts and circumstances set forth herein, and in my letter of the 24th of November last, I am unable to agree with Mr. Sargent that the order requiring proof of the non-mineral character of lands which are sought to be entered as agricultural should be rescinded.

On the contrary, the more I examine the question the more thoroughly I become convinced not only of the propriety but of the absolute necessity for the order, and I therefore recommend that it be adhered to and strictly enforced in the future.

In order, however, to relieve contestants of the expense and trouble of traveling long distances to establish the character of lands, I will, if it meets your concurrence and approval, issue instructions to the local officers to allow the proof on that particular point to be taken before a clerk of a court of record for the county within which the lands are situated, after due notice has been given of the time and place for taking such proof.

I am, sir, with great respect, your obedient servant,

WILLIS DRUMMOND,  
*Commissioner.*

Hon. COLUMBUS DELANO,  
*Secretary of the Interior.*

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DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
March 20, 1872.

GENTLEMEN: In order to save as much as possible the expense, trouble, and delay incident to the present manner of taking proofs as to the mineral or agricultural character of lands, it is hereby directed that testimony *upon this point* may be taken before a clerk of a court of record in and for the county in which the land in question is situate, after due notice in the following manner, to wit:

Hereafter, when an application is filed to enter land as agricultural which is alleged under oath to be mineral in character, or which is returned upon the official township plat as mineral, or land which is now or may hereafter be suspended by order of this office for proof as to the non-mineral character thereof, you will, upon such application being made, require such applicant to publish, at his own expense, a notice thereof once each week for four consecutive weeks in a newspaper of largest circulation published nearest to the land in question; such notice to give the name and address of the claimant, the designation of the subdivision embraced by his filing, the names of any miners or mining companies whose claims or improvements are upon the land or in the immediate vicinity thereof, the names of the parties who filed the affidavits that the land is mineral, and finally the notice should name a day, which shall not be less than thirty days from the date of the first insertion of said notice in such newspaper, upon which testimony will be taken before the county clerk, to determine the facts as to the mineral or non-mineral character of the land, when such persons as may be brought by the parties in interest will be examined and their testimony reduced to writing; the whole to be duly attested by the seal of the court and transmitted to the register and the receiver, who will thereupon examine and forward the same to this office, with their joint opinion as to the character of the land as shown by the testimony. A copy of this notice must be posted in a conspicuous place, upon each forty-acre subdivision



claimed, for four consecutive weeks, proof of which must be made under oath by at least two persons, who will state when the notice was posted and where posted.

At the hearing, there must be filed the affidavit of the publisher of the paper that the said notice was published for the required time, stating when and for how long such publication was made, a printed copy thereof to be attached and made a part of the affidavit. In every case where practicable, in addition to the foregoing, *personal* notice must be served upon the mineral affiants, and upon any parties who may be mining upon or claiming the land.

At the hearing, the claimants and witnesses will be thoroughly examined with regard to the character of the land; whether the same has been thoroughly prospected; whether or not there exists within the tract or tracts claimed any lode or vein of quartz or other rock in place, bearing gold, silver, cinnabar, or copper, which has ever been claimed, located, recorded, or worked; whether such work is entirely abandoned, or whether occasionally resumed; if such lode does exist, by whom claimed, under what designation, and in which subdivision of the land it lies; whether any placer mine or mines exist upon the land; if so, what is the character thereof—whether of the shallow surface description, or of the deep cement, blue lead, or gravel deposits; to what extent mining is carried on when water can be obtained, and what the facilities are for obtaining water for mining purposes; upon what particular forty-acre subdivisions mining has been done, and at what time the land was abandoned for mining purposes, if abandoned at all.

The testimony should also show the agricultural capacities of the land, what kind of crops are raised thereon, and the value thereof; the number of acres actually cultivated for crops of cereals or vegetables, and within which particular forty-acre subdivisions such crops are raised; also which of these subdivisions embraces his improvements, giving in detail the extent and value of his improvements, such as house, barn, vineyard, orchard, fencing, &c.

It is thought that *bona fide* settlers upon lands really agricultural will be able to show, by a clear, logical, and succinct chain of evidence, that their claims are founded upon law and justice; while parties who have made little or no permanent agricultural improvements, and who only seek title for speculative purposes, on account of the mineral deposits known to themselves to be contained in the land, will be defeated in their intentions.

The testimony should be as full and complete as possible; and in addition to the leading points indicated above, everything of importance bearing upon the question of the character of the land should be elicited at the hearing.

If, upon a review of the testimony at this office, a forty-acre tract should be found to be properly mineral in character, that fact will be no bar to the execution of the settler's legal right to the remaining *non-mineral* portion of his claim, if contiguous.

The fees for taking testimony and reducing the same to writing, in these cases, when taken by a clerk of a court of record, as aforesaid, will have to be defrayed by the parties in interest.

When, by reason of proximity to the local land office, an applicant to enter lands of this class prefers to have the testimony taken before the register and the receiver, instead of the clerk of a court of record, as aforesaid, he has that option. In such case the mode of proceeding is fully set forth in the inclosed circular of the 6th May, 1871, which circular is hereby modified, as to the manner of giving notice, so as to conform with these instructions relative to that point.

It must be steadily kept in mind that the testimony hereby authorized to be taken before the clerk of a court is not for the purpose of determining questions of conflict between either pre-emption or mineral claimants, but simply to determine *the character of the land*, whether mineral or agricultural.

When the testimony is taken before the clerk of a court, as aforesaid, the register and the receiver will be entitled to no fees; those paid by the parties to the county clerk being all they are required to pay with reference to the proof as to the character of the land.

No fear need be entertained that miners will be permitted to make entries of tracts ostensibly as mining claims, which are not mineral, simply for the purpose of obtaining possession and defrauding settlers out of their valuable agricultural improvements; it being almost an impossibility for such a fraud to be consummated under the laws and regulations applicable to obtaining patents for mining claims.

The fact that a certain tract of land is decided upon testimony to be mineral in character, is by no means equivalent to an award of the land to a miner. A miner is compelled by law to give three months' publication of notice, and three months' posting of diagrams and notices, as a preliminary step; and then, before he can enter the land, he must show that the land yields mineral; that he is entitled to the possessory right thereto in virtue of compliance with local customs or rules of miners, or by virtue of the statute of limitations; that he or his grantors have expended, in actual labor and improvements, an amount of not less than one thousand dollars thereon, and that the claim is one in regard to which there is no controversy or opposing claim. After all



these proofs are met, he is entitled to have a survey made at his own cost, where a survey is required, after which he can enter and pay for the land embraced by his claim.

It is quite unlikely that a miner will undertake these long and expensive proceedings, simply for the purpose of attempting to defraud an agriculturist out of a tract of land which was not mineral, but improved agricultural land, when there is an absolute certainty, not only of his scheme being frustrated, but also of his being unable to furnish the proof always required as a basis of patent for a mineral claim.

You are requested to give the foregoing careful attention, and to furnish copies hereof to parties upon application, in order that they may be fully informed in the premises.

Very respectfully, your obedient servant,

WILLIS DRUMMOND,  
*Commissioner.*

REGISTER AND RECEIVER,  
*United States Land Office at \_\_\_\_\_.*

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
*Washington, D. C., April 20, 1872.*

GENTLEMEN: Referring to my letter to you of December 2, 1871, directing you to suspend from disposal as agricultural lands certain townships therein designated, until the non-mineral character thereof shall have first been established by competent proof taken at a hearing to be had after due notice, I have to state that said order is modified with respect to entries which had already been made and reported to this office before said instructions were issued, but will be strictly enforced with regard to all applications to enter such lands as agricultural made subsequent to said order.

The cases which had been reported prior to the date of said instructions, as aforesaid, will each be carefully examined in its turn, and if, from the facts in any case, a further hearing or additional proof is necessary, the proper ruling will be made in the premises. You will make this known to all parties in interest and acknowledge its receipt.

Very respectfully, your obedient servant,

WILLIS DRUMMOND,  
*Commissioner.*

REGISTER AND RECEIVER,  
*United States Land Office at \_\_\_\_\_.*

*Non-mineral affidavit required.*

For the more complete protection of the reserved mineral lands from fraudulent entry, the following non-mineral affidavit is now required to be taken by all applicants for agricultural land in the States of California, Nevada, and Oregon, and the Territories of Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, and Washington, viz:

COUNTY OF \_\_\_\_\_,  
\_\_\_\_\_ of \_\_\_\_\_, ss:

\_\_\_\_\_, being duly sworn according to law, deposes and says that he is the identical \_\_\_\_\_ who is an applicant for Government title to the \_\_\_\_\_; that he is well acquainted with the character of said described land, and with each and every legal subdivision thereof, having frequently passed over the same; that his knowledge of said land is such as to enable him to testify understandingly with regard thereto; that there is not, to his knowledge, within the limits thereof, any vein or lode of quartz or other rock in place, bearing gold, silver, cinnabar, lead, tin, or copper, or any deposit of coal; that there is not, within the limits of said land, to his knowledge, any placer, cement, gravel, or other valuable mineral deposit; that no portion of said land is claimed for mining purposes under the local customs or rules of miners or otherwise; that no portion of said land is worked for mineral during any part of the year by any person or persons; that said land is essentially non-mineral land, and that his application therefor is not made for the purpose of fraudulently obtaining title to mineral land, but with the object of securing said land for agricultural purposes.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, A. D. 187 , and I hereby certify that the foregoing affidavit was read to the said \_\_\_\_\_ previous to his name being subscribed thereto; and that deponent is a respectable person, to whose affidavit full faith and credit should be given.



*Adverse claims under statute of July 26, 1866.—Ninety-day rule required.*

Owing to the somewhat ambiguous language employed in the third and sixth sections of the mining act of July 26, 1866, in relation to filing adverse claims, much difference of opinion always existed among parties interested respecting the time within which adverse filings could be made to have legal effect and serve as a bar to proceedings for patent. The construction given the act by my predecessor, allowing these adverse filings to take effect where made at any time before the approval of the survey by the surveyor general, having been called into question in the case of the Flagstaff Mining Claim, in Utah Territory, against which application adverse claims had been filed after the ninety days' notice had expired, but before the approval of the final survey by the surveyor general, the head of the Department, upon a full examination of the law, reversed the rule under which adverse filings had been allowed after the ninety days' notice had expired; his decision in the premises being as follows:

DEPARTMENT OF THE INTERIOR,  
Washington, D. C., March 11, 1872.

SIR: I have had under consideration the appeal from decision in the matter of the Flagstaff Lode, in Utah Territory.

The only ground upon which you declined to issue a patent was that certain adverse claims had been filed with the register after the expiration of the ninety days from the date of the published notice, and before the approval of the corrected survey.

It appears that the notice was published on the 24th day of June, 1870, and one of the adverse claims was filed on the 28th of December, 1871, and the other on the 10th of January, 1872. The original survey was approved by the surveyor general on the 18th of September, 1871. The corrected survey was approved on the 16th of January, 1872.

The original was not approved by the Commissioner or Department, because it did not conform to the original application and diagram in this, to wit: The application and diagram purported to start at a given course and distance from mineral monument No. 4, and the survey at the same course and distance from mineral monument No. 3. The application and diagram represented the surface premises to extend from the discovery shaft south  $36^{\circ}$  west 1,200 feet, and north  $36^{\circ}$  east 1,400 feet. The survey represented the tract as extending from the discovery shaft south  $49^{\circ}$  east 1,200 feet, and north  $45^{\circ} 39'$  west 1,400 feet.

There was then no evidence in the case showing that mineral monuments Nos. 3 and 4 were identical. Now that fact is clearly shown, and it is also shown that the corrected survey corresponds with the original application and survey, and that the original survey covered the identical discovery shaft, now contained in the corrected survey, and that both the original and corrected surveys cover the identical discovery shaft set forth and included in the application and diagram. I state these facts for the purpose of showing that the adverse claimants are not prejudiced by the filing of the corrected survey, for it covers the identical discovery shaft included in the original published notice, which notice they disregarded. They did not file any adverse claim under it within ninety days from its publication, or at any time. If they could safely omit to file, under that notice, it seems to me that they can safely do so under the present corrected survey. The original survey was approved before any adverse claim was filed. That survey was not set aside. It was ordered to be corrected. It has been corrected. It may well be doubted whether it, as corrected, is such a new survey as would permit the filing of an adverse claim between the dates of the approval of the original and the approval of the corrected survey, even admitting that the law allowed adverse filings at any time before approval and did not limit them to ninety days from the publication of the notice. But does the law permit such adverse filings after the expiration of ninety days from the publication of the notice?

The second section of the mining act of July 26, 1866, provides that the claimant, who has previously occupied and improved a vein or lode and expended in labor or improvements not less than one thousand dollars, shall file, in the local land office, a diagram of the same, so extended laterally, or otherwise, as to conform to the local laws, and that it shall be lawful for him to enter such tract and receive a patent therefor. The third section provides that upon the filing of the diagram, as provided in said second section, and posting the same in a conspicuous place on the claim, together with a notice of intention to apply for a patent, the register of the land office shall publish a notice of the same in a newspaper published nearest the location of said claim, and



shall also post such notice in his office for the period of ninety days, "and after the expiration of said period, *if no adverse claim shall have been filed*," (these words seem clearly to require the adverse claim "to have been filed" prior to the expiration of the ninety days' notice,) "it shall be the duty of the surveyor general, upon application of the party, to survey the premises and make a plat thereof, indorsed with his approval, designating the number and description of the location, the value of the labor and improvements, and the character of the vein exposed; and upon the payment to the proper officer of five dollars per acre, together with the cost of such survey, plat, and notice, and giving satisfactory evidence that said diagrams have been posted on the claim during said period of ninety days, the register of the land office shall transmit to the General Land Office said plat, survey, and description, and *a patent shall issue therefor*."

The plain meaning of this is, that the register shall give the notice required for the period of ninety days, and that parties having adverse claims shall have the entire ninety days in which to file their claims, and that upon the expiration of the ninety days, immediately upon its expiration—the very next day thereafter, *if there have been no adverse claims filed*—the claimant shall have the right to apply to the surveyor general for a survey, and upon its being approved and the land paid for, and the proper papers forwarded to the Commissioner, he shall be entitled to his patent. Ninety days are given in which to file adverse claims. They must be filed within that period. This is certainly a reasonable notice. It is much longer than publication is generally required by State laws to bring in absent parties and acquire jurisdiction over important interests.

Is this rule, thus clearly stated, changed by the sixth section of the same act?

That section provides: "That whenever any adverse claimants to any mine, located and claimed as aforesaid, shall appear before the approval of the survey, as provided in the third section of this act, all proceedings shall be stayed until final settlement and adjudication in the court of competent jurisdiction of the rights of possession to such claim, when a patent may issue as in other cases." The object of this section is to declare what shall be done when an adverse claim has been filed. It is not to declare when an adverse claim shall be filed. That had already been done in the third section. It recites that when "any adverse claimants \* \* \* shall appear before the approval of the survey, as provided in the third section of this act," then all proceedings shall be stayed, &c. Of course, it must be "before the approval of the survey," if done in accordance with the third section, for that section requires the adverse claim to be filed within the ninety days. Any other construction would allow an adverse claim to be filed at any time before approval of the survey. A survey might be in the main correct, but yet erroneous in description or otherwise, in some slight particulars; and yet, in such a case, an adverse claim might be filed, which of itself would suspend the approval of the survey until it was adjudicated. Another claim might be filed before that was disposed of, or the survey approved, and thus adverse claims might lap over each other until it would be almost an impossibility for a claimant to be in a condition where he could demand an approval of his survey, and the issuing of his patent.

A construction which leads to such consequences ought not to prevail. I have concluded to adopt the one which requires the filing to be made within the ninety days.

Your decision is, therefore, reversed, and the papers, together with your letter of the 28th ultimo, herewith returned.

Very respectfully,

C. DELANO, *Secretary*.

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office.*

### *Mining statute of May 10, 1872.*

Under this act, the following circular instructions have been issued:

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
June 10, 1872.

GENTLEMEN: Your attention is invited to the act of Congress approved May 10, 1872, which is as follows, to wit:

AN ACT to promote the development of the mining resources of the United States.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local cus-



toms or rules of miners, in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States.

SEC. 2. That mining claims upon veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits, heretofore located, shall be governed as to length along the vein or lode by the customs, regulations, and laws in force at the date of their location. A mining claim located after the passage of this act, whether located by one or more persons, may equal, but shall not exceed, one thousand five hundred feet in length along the vein or lode; but no location of a mining claim shall be made until the discovery of the vein or lode within the limits of the claim located. No claim shall extend more than three hundred feet on each side of the middle of the vein at the surface, nor shall any claim be limited by any mining regulation to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights existing at the passage of this act shall render such limitation necessary. The end lines of each claim shall be parallel to each other.

SEC. 3. That the locators of all mining locations heretofore made, or which shall hereafter be made, on any mineral vein, lode, or ledge, situated on the public domain, their heirs and assigns, where no adverse claim exists at the passage of this act, so long as they comply with the laws of the United States, and the State, territorial, and local regulations not in conflict with said laws of the United States governing their possessory title, shall have the exclusive right of possession and enjoyment of all the surface included within the lines of their locations, and of all veins, lodes, and ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of said surface locations: *Provided*, That their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as aforesaid, through the end lines of their locations, so continued in their own direction that such planes will intersect such exterior parts of said veins or ledges: *And provided further*, That nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course beyond the vertical lines of his claim to enter upon the surface of a claim owned or possessed by another.

SEC. 4. That where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins on the line of said tunnel.

SEC. 5. That the miners of each mining district may make rules and regulations not in conflict with the laws of the United States, or with the laws of the State or Territory in which the district is situated, governing the location, manner of recording, amount of work necessary to hold possession of a mining claim, subject to the following requirements: The location must be distinctly marked on the ground so that its boundaries can be readily traced. All records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or claims located by reference to some natural object or permanent monument as will identify the claim. On each claim located after the passage of this act, and until a patent shall have been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year. On all claims located prior to the passage of this act, ten dollars' worth of labor shall be performed or improvements made each year for each one hundred feet in length along the vein until a patent shall have been issued therefor; but where such claims are held in common such expenditure may be made upon any one claim; and upon a failure to comply with these conditions, the claim or mine upon which such failure occurred shall be open to relocation in the same manner as if no location of the same had ever been made: *Provided*, That the original locators, their heirs, assigns, or legal representatives, have not resumed work upon the claim after such failure and before such location. Upon the failure of any one of several co-owners to contribute his proportion of the expenditures required by this act, the co-owners who have performed the labor or made the improvements may, at the expiration of the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest the claim, for at least once a week for ninety days, and if at the expiration of ninety days after such notice in writing or by publication such delinquent should fail or refuse to contribute his proportion to comply with this act, his



interest in the claim shall become the property of his co-owners who have made the required expenditures.

SEC. 6. That a patent for any land claimed and located for valuable deposits may be obtained in the following manner: Any person, association, or corporation authorized to locate a claim under this act, having claimed and located a piece of land for such purposes, who has, or have, complied with the terms of this act, may file in the proper land office an application for a patent, under oath, showing such compliance, together with a plat and field-notes of the claim or claims in common, made by or under the direction of the United States surveyor general, showing accurately the boundaries of the claim or claims, which shall be distinctly marked by monuments on the ground, and shall post a copy of such plat, together with a notice of such application for a patent, in a conspicuous place on the land embraced in such plat previous to the filing of the application for a patent, and shall file an affidavit of at least two persons that such notice has been duly posted as aforesaid, and shall file a copy of said notice in such land office, and shall thereupon be entitled to a patent for said land, in the manner following: The register of the land office, upon the filing of such application, plat, field-notes, notices, and affidavits, shall publish a notice that such application has been made, for the period of sixty days, in a newspaper to be by him designated as published nearest to said claim; and he shall also post such notice in his office for the same period. The claimant at the time of filing this application, or at any time thereafter, within the sixty days of publication, shall file with the register a certificate of the United States surveyor general that five hundred dollars' worth of labor has been expended or improvements made upon the claim by himself or grantors; that the plat is correct, with such further description by such reference to natural objects or permanent monuments as shall identify the claim, and furnish an accurate description, to be incorporated in the patent. At the expiration of the sixty days of publication the claimant shall file his affidavit, showing that the plat and notice have been posted in a conspicuous place on the claim during said period of publication. If no adverse claim shall have been filed with the register and the receiver of the proper land office at the expiration of the sixty days of publication it shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of five dollars per acre, and that no adverse claim exists; and thereafter no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with this act.

SEC. 7. That where an adverse claim shall be filed during the period of publication it shall be upon oath of the person or persons making the same, and shall show the nature, boundaries, and extent of such adverse claim, and all proceedings, except the publication of notice and making and filing of the affidavit thereof, shall be stayed until the controversy shall have been settled or decided by a court of competent jurisdiction, or the adverse claim waived. It shall be the duty of the adverse claimant, within thirty days after filing his claim, to commence proceedings in a court of competent jurisdiction, to determine the question of the right of possession, and prosecute the same with reasonable diligence to final judgment; and a failure so to do shall be a waiver of his adverse claim. After such judgment shall have been rendered, the party entitled to the possession of the claim, or any portion thereof, may, without giving further notice, file a certified copy of the judgment-roll with the register of the land office, together with the certificate of the surveyor general that the requisite amount of labor has been expended, or improvements made thereon, and the description required in other cases, and shall pay to the receiver five dollars per acre for his claim, together with the proper fees, whereupon the whole proceedings and the judgment-roll shall be certified by the register to the Commissioner of the General Land Office, and a patent shall issue thereon for the claim, or such portion thereof as the applicant shall appear, from the decision of the court, to rightly possess. If it shall appear, from the decision of the court, that several parties are entitled to separate and different portions of the claim, each party may pay for his portion of the claim, with the proper fees, and file the certificate and description by the surveyor general, whereupon the register shall certify the proceedings and judgment-roll to the Commissioner of the General Land Office, as in the preceding case, and patents shall issue to the several parties according to their respective rights. Proof of citizenship under this act, or the acts of July twenty-sixth, eighteen hundred and sixty-six, and July ninth, eighteen hundred and seventy, in the case of an individual, may consist of his own affidavit thereof, and in case of an association of persons unincorporated of the affidavit of their authorized agent, made on his own knowledge or upon information and belief, and in case of a corporation organized under the laws of the United States, or of any State or Territory of the United States, by the filing of a certified copy of their charter or certificate of incorporation; and nothing herein contained shall be construed to prevent the alienation of the title conveyed by a patent for a mining claim to any person whatever.

SEC. 8. That the description of vein or lode claims, upon surveyed lands, shall designate the location of the claim with reference to the lines of the public surveys, but



need not conform therewith; but where a patent shall be issued as aforesaid for claims upon unsurveyed lands, the surveyor general, in extending the surveys, shall adjust the same to the boundaries of such patented claim, according to the plat or description thereof, but so as in no case to interfere with or change the location of any such patented claim.

SEC. 9. That sections one, two, three, four, and six of an act entitled 'An act granting the right of way to ditch and canal owners over the public lands, and for other purposes,' approved July twenty-sixth, eighteen hundred and sixty-six, are hereby repealed, but such repeal shall not affect existing rights. Applications for patents for mining-claims now pending may be prosecuted to a final decision in the General Land Office; but in such cases where adverse rights are not affected thereby, patents may issue in pursuance of the provisions of this act; and all patents for mining claims heretofore issued under the act of July twenty-sixth, eighteen hundred and sixty-six, shall convey all the rights and privileges conferred by this act where no adverse rights exist at the time of the passage of this act.

SEC. 10. That the act entitled 'An act to amend an act granting the right of way to ditch and canal owners over the public lands, and for other purposes,' approved July ninth, eighteen hundred and seventy, shall be and remain in full force, except as to the proceedings to obtain a patent, which shall be similar to the proceedings prescribed by sections six and seven of this act for obtaining patents to vein or lode claims; but where said placer claims shall be upon surveyed lands, and conform to legal subdivisions, no further survey or plat shall be required, and all placer mining claims hereafter located shall conform as near as practicable with the United States system of public land surveys and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant, but where placer claims cannot be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands: *Provided*, That proceedings now pending may be prosecuted to their final determination under existing laws; but the provisions of this act, when not in conflict with existing laws, shall apply to such cases: *And provided also*, That where by the segregation of mineral land in any legal subdivision a quantity of agricultural land less than forty acres remains, said fractional portion of agriculture land may be entered by any party qualified by law, for homestead or pre-emption purposes.

SEC. 11. That where the same person, association, or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the placer claim, with the statement that it includes such vein or lode, and in such case (subject to the provisions of this act and the act entitled 'An act to amend an act granting the right of way to ditch and canal owners over the public lands, and for other purposes,' approved July ninth, eighteen hundred and seventy,) a patent shall issue for the placer claim, including such vein or lode, upon the payment of five dollars per acre for such vein or lode claim, and twenty-five feet of surface on each side thereof. The remainder of the placer claim, or any placer claim not embracing any vein or lode claim, shall be paid for at the rate of two dollars and fifty cents per acre, together with all costs of proceedings; and where a vein or lode, such as is described in the second section of this act, is known to exist within the boundaries of a placer claim, an application for a patent for such placer claim, which does not include an application for the vein or lode claim, shall be construed as a conclusive declaration that the claimant of the placer claim has no right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer claim is not known, a patent for the placer claim shall convey all valuable and mineral and other deposits within the boundaries thereof.

SEC. 12. That the surveyor general of the United States may appoint in each land district containing mineral lands as many competent surveyors as shall apply for appointment to survey mining claims. The expenses of the survey of vein or lode claims, and the survey and subdivision of placer claims into smaller quantities than one hundred and sixty acres, together with the cost of publication of notices, shall be paid by the applicants, and they shall be at liberty to obtain the same at the most reasonable rates, and they shall also be at liberty to employ any United States deputy surveyor to make the survey. The Commissioner of the General Land Office shall also have power to establish the maximum charges for surveys and publication of notices under this act; and, in case of excessive charges for publication, he may designate any newspaper published in a land district where mines are situated, for the publication of mining notices in such district, and fix the rates to be charged by such paper; and, to the end that the Commissioner may be fully informed on the subject, each applicant shall file with the register a sworn statement of all charges and fees paid by said applicant for publication and surveys, together with all fees and money paid the register and the receiver of the land office, which statement shall be transmitted, with the other papers in the case, to the Commissioner of the General Land Office. The fees of the register and the receiver shall be five dollars each for filing and acting upon each application for patent or adverse claim filed, and they shall be allowed the amount fixed by law for reducing testimony to writing, when done in the land office, such fees



and allowances to be paid by the respective parties; and no other fees shall be charged by them in such cases. Nothing in this act shall be construed to enlarge or affect the rights of either party in regard to any property in controversy at the time of the passage of this act, or of the act entitled 'An act granting the right of way to ditch and canal owners over the public lands, and for other purposes,' approved July twenty-sixth, eighteen hundred and sixty-six, nor shall this act affect any right acquired under said act; and nothing in this act shall be construed to repeal, impair, or in any way affect the provisions of the act entitled 'An act granting to A. Sutro the right of way and other privileges to aid in the construction of a draining and exploring tunnel to the Comstock lode, in the State of Nevada,' approved July twenty-fifth, eighteen hundred and sixty-six.

SEC. 13. That all affidavits required to be made under this act, or the act of which it is amendatory, may be verified before any officer authorized to administer oaths within the land district where the claims may be situated, and all testimony and proofs may be taken before any such officer, and, when duly certified by the officer taking the same, shall have the same force and effect as if taken before the register and receiver of the land office. In cases of contest as to the mineral or agricultural character of land, the testimony and proofs may be taken as herein provided, on personal notice of at least ten days to the opposing party; or if said party cannot be found, then by publication of at least once a week for thirty days in a newspaper, to be designated by the register of the land office as published nearest to the location of such land; and the register shall require proof that such notice has been given.

SEC. 14. That where two or more veins intersect or cross each other, priority of title shall govern, and such prior location shall be entitled to all ore or mineral contained within the space of intersection: *Provided, however,* That the subsequent location shall have the right of way through said space of intersection for the purposes of the convenient working of the said mine: *And provided also,* That where two or more veins unite, the oldest or prior location shall take the vein below the point of union, including all the space of intersection.

SEC. 15. That where non-mineral land not contiguous to the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable under this act to veins or lodes: *Provided,* That no location hereafter made of such non-adjacent land shall exceed five acres, and payment for the same must be made at the same rate as fixed by this act for the superficies of the lode. The owner of a quartz mill or reduction works, not owing a mine in connection therewith, may also receive a patent for his mill site, as provided in this section.

SEC. 16. That all acts and parts of acts inconsistent herewith are hereby repealed: *Provided,* That nothing contained in this act shall be construed to impair, in any way, rights or interests in mining property acquired under existing laws.

Approved May 10, 1872.

#### MINERAL LANDS OPEN TO EXPLORATION, OCCUPATION, AND PURCHASE.

1. It will be perceived that the first section of said act leaves the mineral lands in the public domain, surveyed or unsurveyed, open to exploration, occupation, and purchase by all citizens of the United States and all those who have declared their intention to become such.

#### STATUS OF LODE CLAIMS PREVIOUSLY LOCATED.

2. By an examination of the several sections of the foregoing act it will be seen that the *status* of lode claims located *previous* to the date thereof is not changed with regard to their *extent along the lode or width of surface*, such claims being restricted and governed both as to their *lateral and linear* extent by the State, territorial, or local laws, customs, or regulations which were in force in the respective districts at the date of such locations, in so far as the same did not conflict with the limitations fixed by the mining statute of July 26, 1866.—(14 Stat., 251.)

3. Mining rights acquired under such previous locations are, however, enlarged by said act of May 10, 1872, in the following respect, viz: The locators of all such previously taken veins or lodes, their heirs and assigns, so long as they comply with the laws of Congress and with State, territorial, or local regulations not in conflict therewith, governing mining claims, are invested by said act with the exclusive possessory right of all the surface included within the lines of their locations, and of all veins, lodes, or ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of such locations at the surface, it being expressly provided,



however, that the right of possession to such outside parts of said veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as aforesaid, through the end lines of their locations so continued in their own direction that such planes will intersect such exterior parts of such veins, lodes, or ledges; no right being granted, however, to the claimant of such outside portion of a vein or ledge to enter upon the surface location of another claimant.

4. It is to be distinctly understood, however, that the law limits the possessory right to veins, lodes, or ledges *other* than the one named in the original location, to such as were not *adversely claimed at the date of said act of May 10, 1872*, and that where such other vein or ledge was so adversely claimed at that date, the right of the party so adversely claiming is in no way impaired by said act.

5. From and after the date of said act of Congress, in order to hold the possessory title to a mining claim *previously located* and for which a patent has not been issued, the law requires that *ten dollars* shall be expended annually in labor or improvements on each claim of *one hundred feet* on the course of the vein or lode until a patent shall have been issued therefor; but where a number of such claims are held in common upon the same vein or lode the aggregate expenditure that would be necessary to hold all the claims, at the rate of ten dollars per hundred feet, may be made upon any one claim; a failure to comply with this requirement in any one year subjecting the claim upon which such failure occurred to relocation by other parties, the same as if no previous location thereof had ever been made, unless the claimants under the original location shall have resumed work thereon after such failure and before such relocation.

6. Upon the failure of any one of several co-owners of a vein, lode, or ledge, which has not been patented, to contribute his proportion of the expenditures necessary to hold the claim or claims so held in ownership in common, the co-owners who have performed the labor, or made the improvements as required by said act, may, at the expiration of the year, give such delinquent co-owner personal notice in writing, or notice by publication in the newspaper published nearest the claim, for at least once a week for ninety days; and if upon the expiration of ninety days after such notice in writing, or upon the expiration of one hundred and eighty days after the first newspaper publication of notice, the delinquent co-owner shall have failed to contribute his proportion to meet such expenditure or improvements, his interest in the claim by law passes to his co-owners who have made the expenditures or improvements as aforesaid.

#### PATENTS FOR VEINS OR LODES HERETOFORE ISSUED.

7. Rights under patents for veins or lodes heretofore granted under previous legislation of Congress, are enlarged by this act, so as to invest the patentee, his heirs or assigns, with title to all veins, lodes, or ledges throughout their entire depth, the top or apex of which lies within the end and side boundary lines of his claim on the surface, as patented, extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of the claim at the surface. The right of possession to such outside parts of such veins or ledges to be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of the claim at the surface, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges, it being expressly provided, however, that all veins, lodes, or ledges, the top or apex of which lies inside such surface locations, *other* than the one named in the patent, which were *adversely claimed* at the date of said act, are excluded from such conveyance by patent.

8. Applications for patents for mining claims pending at the date of the act of May 10, 1872, may be prosecuted to final decision in the General Land Office, and where no adverse rights are affected thereby, patents will be issued, in pursuance of the provisions of said act.

#### MANNER OF LOCATING CLAIMS ON VEINS OR LODES AFTER THE PASSAGE OF THE ACT OF MAY 10, 1872.

9. From and after the date of said act, any person who is a citizen of the United States, or who has declared his intention to become a citizen, may locate, record, and hold a mining claim of *fifteen hundred linear feet* along the course of any mineral vein or lode subject to location; or an association of persons, severally qualified as above, may make joint location of such claim of *fifteen hundred feet*, but in no event can a location of a vein or lode made subsequent to the act exceed fifteen hundred feet along the course thereof, whatever may be the number of persons composing the association.

10. With regard to the extent of surface ground adjoining a vein or lode, and claimed for the convenient working thereof, the act provides that the lateral extent of locations of veins or lodes made after its passage shall in no case *exceed three hundred feet on each side of the middle of the vein at the surface*, and that no such surface rights shall be limited by any mining regulations to less than twenty-five feet on each side of



the middle of the vein at the surface, except where adverse rights existing at the date of said act may render such limitation necessary, the end lines of such claims to be in all cases parallel to each other.

11. By the foregoing it will be perceived that no lode claim located after the date of said act can exceed a parallelogram fifteen hundred feet in length by six hundred feet in width, but whether surface ground of that width can be taken, depends upon the local regulations or State or territorial laws in force in the several mining districts; and that no such local regulations or State or territorial laws shall limit a vein or lode claim to less than fifteen hundred feet along the course thereof, whether the location is made by one or more persons, nor can surface rights be limited to less than fifty feet in width, unless adverse claims existing on the 10th day of May, 1872, render such lateral limitation necessary.

12. It is provided in said act that the miners of each district may make rules and regulations not in conflict with the laws of the United States, or of the State or Territory in which such districts are respectively situated, governing the location, manner of recording, and amount of work necessary to hold possession of a claim. It likewise requires that the location must be so distinctly marked on the ground that its boundaries may be readily traced. This is a very important matter, and locators cannot exercise too much care in defining their locations at the outset, inasmuch as the law requires that all records of mining locations made subsequent to its passage shall contain the name or names of the locators, the date of the location, and such a *description of the claim or claims* located, by reference to some natural object or permanent monument, as will identify the claim.

13. The said act requires that no lode claim can be recorded until after the discovery of a vein or lode within the limits of the ground claimed; the object of which provision is evidently to prevent the encumbering of the district mining records with useless locations before sufficient work has been done thereon to determine whether a vein or lode has really been discovered or not.

14. The claimant should therefore, prior to recording his claim, unless the vein can be traced upon the surface, sink a shaft, or run a tunnel or drift, to a sufficient depth therein to discover and develop a mineral bearing vein, lode, or crevice; should determine, if possible, the general course of such vein in either direction from the point of discovery, by which direction he will be governed in marking the boundaries of his claim on the surface, and should give the course and distance as nearly as practicable from the discovery shaft on the claim, to some permanent, well known points or objects, such, for instance, as stone monuments, blazed trees, the confluence of streams, point of intersection of well known gulches, ravines, or roads, prominent buttes, hills, &c., which may be in the immediate vicinity, and which will serve to perpetuate and fix the *locus* of the claim and render it susceptible of identification from the description thereof given in the record of locations in the district.

15. In addition to the foregoing *data*, the claimant should state the names of adjoining claims, or if none adjoin, the relative positions of the nearest claims; should drive a post or erect a monument of stones at each corner of his surface ground, and at the point of discovery or discovery shaft should fix a post, stake, or board, upon which should be designated the name of the lode, the name or names of the locators, the number of feet claimed, and in which direction from the point of discovery; it being essential that the location notice filed for record, in addition to the foregoing description, should state whether the entire claim of fifteen hundred feet is taken on one side of the point of discovery, or whether it is partly upon one and partly upon the other side thereof, and in the latter case, how many feet are claimed upon each side of such discovery point.

16. Within a reasonable time, say twenty days after the location shall have been marked on the ground, notice thereof, accurately describing the claim in manner aforesaid, should be filed for record with the proper recorder of the district, who will thereupon issue the usual certificate of location.

17. In order to hold the possessory right to a claim of fifteen hundred feet of a vein or lode located as aforesaid, the act requires that until a patent shall have been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made thereon during each year, in default of which the claim will be subject to relocation by any other party having the necessary qualifications, unless the original locator, his heirs, assigns, or legal representatives, have resumed work thereon after such failure and before such relocation.

18. The importance of attending to these details in the matter of location, labor, and expenditure will be the more readily perceived when it is understood that a failure to give the subject proper attention may invalidate the claim.

#### TUNNEL RIGHTS.

19. The fourth section of the act provides that where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall



have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid, but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins or lodes on the line of said tunnel.

20. The effect of this section is simply to give the proprietors of a mining tunnel run in good faith the possessory right to fifteen hundred feet of any blind lodes cut, discovered, or intersected by such tunnel, which were not previously known to exist, within three thousand feet from the face or point of commencement of such tunnel, and to prohibit other parties, after the commencement of the tunnel, from prospecting for and making locations of lodes on the *line thereof* and within said distance of three thousand feet, unless such lodes appear upon the surface or were previously known to exist.

21. The term "face," as used in said section, is construed and held to mean the first working face formed in the tunnel, and to signify the point at which the tunnel actually enters cover, it being from this point that the three thousand feet are to be counted, upon which prospecting is prohibited as aforesaid.

22. To avail themselves of the benefits of this provision of law, the proprietors of a mining tunnel will be required, at the time they enter cover as aforesaid, to give proper notice of their tunnel location by erecting a substantial post, board, or monument, at the face or point of commencement thereof, upon which should be posted a good and sufficient notice, giving the names of the parties or company claiming the tunnel right, the actual or proposed course or direction of the tunnel, the height and width thereof, and the course and distance from such face or point of commencement to some permanent well known objects in the vicinity by which to fix and determine the *locus* in manner heretofore set forth applicable to locations of veins or lodes; and, at the time of posting such notice they shall, in order that miners or prospectors may be enabled to determine whether or not they are within the lines of the tunnel, establish the boundary lines thereof by stakes or monuments placed along such lines at proper intervals to the terminus of the three thousand feet from the face or point of commencement of the tunnel, and the lines so marked will define and govern as to the specific boundaries within which prospecting for lodes not previously known to exist is prohibited while work on the tunnel is being prosecuted with reasonable diligence.

23. At the time of posting notice and marking out the lines of the tunnel as aforesaid a full and correct copy of such notice of location defining the tunnel claim must be filed for record with the mining recorder of the district, to which notice must be attached the sworn statement or declaration of the owners, claimants, or projectors of such tunnel, setting forth the facts in the case, stating the amount expended by themselves and their predecessors in interest in prosecuting work thereon, the extent of the work performed, and that it is, *bona fide*, their intention to prosecute work on the tunnel so located and described, with reasonable diligence, for the development of a vein or lode, or for the discovery of mines, or both, as the case may be.

24. This notice of location must be duly recorded, and, with the said sworn statement attached, kept on the recorder's files for future reference.

25. By a compliance with the foregoing much needless difficulty will be avoided, and the way for the adjustment of legal rights acquired in virtue of said fourth section of the act will be made much more easy and certain.

26. This office will take particular care that no improper advantage is taken of this provision of law by parties making, or professing to make, tunnel locations ostensibly for the purposes named in the statute, but really for the purpose of monopolizing the lands lying in front of their tunnels to the detriment of the mining interests, and to the exclusion of *bona fide* prospectors or miners, but will hold such tunnel claimants to a strict compliance with the terms of the act; and, as *reasonable diligence* on their part in prosecuting the work is one of the essential conditions of their implied contract, negligence or want of due diligence will be construed as working a forfeiture of their right to all undiscovered veins on the line of such tunnel.

#### MANNER OF PROCEEDING TO OBTAIN GOVERNMENT TITLE TO VEIN OR LODE CLAIMS.

27. By the sixth section of said act authority is given for granting title for mines by patent from the Government to any person, association, or corporation having the necessary qualifications as to citizenship, and holding the right of possession to a claim in compliance with law.

28. The claimant is required, in the first place, to have a correct survey of his claim made under authority of the surveyor general of the State or Territory in which the claim lies; such survey to show with accuracy the exterior surface boundaries of the



claim, which boundaries are required to be distinctly marked by monuments on the ground.

29. The claimant is then required to post a copy of the plat of such survey in a conspicuous place upon the claim, together with notice of his intention to apply for a patent therefor, which notice will give the date of posting, the name of the claimant, the name of the claim, mine, or lode; the mining district and county; whether the location is of record, and if so, where the record may be found; the number of feet claimed along the vein and the presumed direction thereof; the number of feet claimed on the lode in each direction from the point of discovery, or other well-defined place on the claim; the name or names of adjoining claimants on the same or other lodes; or if none adjoin, the names of the nearest claims, &c.

30. After posting the said plat and notice upon the premises, the claimant will file with the proper register and receiver a copy of such plat, and the field notes of survey of the claim, accompanied by the affidavit of a least two credible witnesses that such plat and notice are posted conspicuously upon the claim, giving the date and place of such posting; a copy of the *notice* so posted to be attached to, and form a part of, said affidavit.

31. Attached to the field notes so filed must be the sworn statement of the claimant that he has the possessory right to the premises therein described, in virtue of a compliance by himself (and by his grantors, if he claims by purchase) with the mining rules, regulations, and customs of the mining district, State, or Territory in which the claim lies, and with the mining laws of Congress; such sworn statement to narrate briefly, but as clearly as possible, the facts constituting such compliance, the origin of his possession, and the basis of his claim to a patent.

32. This affidavit should be supported by appropriate evidence from the mining recorder's office as to his possessory right, as follows, viz: Where he claims to be a locator, a full, true, and correct copy of such location should be furnished, as the same appears upon the mining records; such copy to be attested by the seal of the recorder, or if he has no seal, then he should make oath to the same being correct, as shown by his records; where the applicant claims as a locator in company with others, who have since conveyed their interests in the lode to him, a copy of the original record of location should be filed, together with an abstract of title from the proper recorder, under seal or oath as aforesaid, tracing the colocator's possessory rights in the claim to such applicant for patent; where the applicant claims only as a purchaser for valuable consideration, a copy of the location record must be filed, under seal or upon oath as aforesaid, with an abstract of title certified as above by the proper recorder, tracing the right of possession by a continuous chain of conveyances from the original locators to the applicant.

33. In the event of the mining records in any case having been destroyed by fire or otherwise lost, affidavit of the fact should be made, and secondary evidence of possessory title will be received, which may consist of the affidavit of the claimant, supported by those of any other parties cognizant of the facts relative to his location, occupancy, possession, improvements, &c.; and in such case of lost records, any deeds, certificates of location or purchase, or other evidence which may be in the claimant's possession, and tend to establish his claim, should be filed.

34. Upon the receipt of these papers the register will, at the expense of the claimant, publish a notice of such application for the period of sixty days, in a newspaper published nearest to the claim, and will post a copy of such notice in his office for the same period.

35. The notices so published and posted must be as full and complete as possible, and embrace all the *data* given in the notice posted upon the claim.

36. Too much care cannot be exercised in the preparation of these notices, inasmuch as upon their accuracy and completeness will depend, in a great measure, the regularity and validity of the whole proceeding.

37. The claimant, either at the time of filing these papers with the register, or at any time during the sixty days' publication, is required to file a certificate of the surveyor general that not less than five hundred dollars' worth of labor has been expended or improvements made upon the claim by the applicant or his grantors; that the plat filed by the claimant is correct; that the field notes of the survey, as filed, furnish such an accurate description of the claim as will, if incorporated into a patent, serve to fully identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the *locus* thereof.

38. It will be the more convenient way to have this certificate indorsed by the surveyor general, both upon the plat and field notes of survey filed by the claimant as aforesaid.

39. After the sixty days' period of newspaper publication has expired the claimant will file his affidavit, showing that the plat and notice aforesaid remained conspicuously posted upon the claim sought to be patented during said sixty days' publication.

40. Upon the filing of this affidavit the register will, if no adverse claim was filed in



his office during the period of publication, permit the claimant to pay for the land according to the area given in the plat and field notes of survey aforesaid, at the rate of five dollars for each acre and five dollars for each fractional part of an acre, the receiver issuing the usual duplicate receipt therefor; after which the whole matter will be forwarded to the Commissioner of the General Land Office, and a patent issued thereon if found regular.

41. In sending up the papers in the case, the register must not omit certifying to the fact that the notice was posted in his office for the full period of sixty days, such certificate to state distinctly when such posting was done, and how long continued.

42. The consecutive series of numbers of mineral entries must be continued, whether the same are of lode or placer claims.

43. The surveyor general must continue to designate all surveyed mineral claims as heretofore by a progressive series of numbers, beginning with lot No. 37 in each township; the claim to be so designated at date of filing the plat, field notes, &c., in addition to the local designation of the claim; it being required in all cases that the plat and field notes of the survey of a claim must, in addition to the reference to permanent objects in the neighborhood, describe the *locus* of the claim with reference to the lines of public surveys by a line connecting a corner of the claim with the nearest public corner of the United States surveys, unless such claim be on unsurveyed lands at a remote distance from such public corner; in which latter case the reference by course and distance to permanent objects in the neighborhood will be a sufficient designation by which to fix the *locus* until the public surveys shall have been closed upon its boundaries.

#### ADVERSE CLAIMS.

44. The seventh section of the act provides for adverse claims; fixes the time within which they shall be filed to have legal effect, and prescribes the manner of their adjustment.

45. Said section requires that the adverse claim shall be filed during the period of publication of notice; that it must be on the oath of the adverse claimant; and that it must show the "*nature*," the "*boundaries*," and the "*extent*" of the adverse claim.

46. In order that this section of law may be properly carried into effect, the following is communicated for the information of all concerned:

47. An adverse mining claim must be filed with the register of the same land office with whom the application for patent was filed, or in his absence with the receiver, and within the sixty days' period of newspaper publication of notice.

48. The adverse notice must be duly sworn to before an officer authorized to administer oaths within the land district, or before the register or receiver; it will fully set forth the nature and extent of the interference or conflict; whether the adverse party claims as a purchaser for valuable consideration or as a locator; if the former, the original conveyance, or a duly certified copy thereof, should be furnished, or if the transaction was a mere verbal one he will narrate the circumstances attending the purchase, the date thereof, and the amount paid, which facts should be supported by the affidavit of one or more witnesses, if any were present at the time, and if he claims as a locator he must file a duly certified copy of the location from the office of the proper recorder.

49. In order that the "*boundaries*" and "*extent*" of the claim may be shown, it will be incumbent upon the adverse claimant to file a plat showing his claim and its relative situation or position with the one against which he claims, so that the extent of the conflict may be the better understood. This plat must be made from an actual survey by a United States deputy surveyor, who will officially certify thereon to its correctness; and in addition there must be attached to such plat of survey a certificate or sworn statement by the surveyor as to the approximate value of the labor performed or improvements made upon the claim of the adverse party, and the plat must indicate the positions of any shafts, tunnels, or other improvements, if any such exist, upon the claim of the party opposing the application.

50. Upon the foregoing being filed within the sixty days as aforesaid, the register, or in his absence the receiver, will give notice in writing to *both parties* to the contest that such adverse claim has been filed, informing them that the party who filed the adverse claim will be required within thirty days from the date of such filing to commence proceedings in a court of competent jurisdiction, to determine the question of right of possession, and to prosecute the same with reasonable diligence to final judgment, and that should such adverse claimant fail to do so, his adverse claim will be considered waived, and the application for patent be allowed to proceed upon its merits.

51. When an adverse claim is filed as aforesaid, the register or receiver will indorse upon the same the precise date of filing, and preserve a record of the date of notifications issued thereon; and thereafter all proceedings on the application for patent will be suspended, with the exception of the completion of the publication and posting of



notices and plat, and the filing of the necessary proof thereof, until the controversy shall have been adjudicated in court, or the adverse claim waived or withdrawn.

52. The proceedings after rendition of judgment by the court in such case are so clearly defined by the act itself as to render it unnecessary to enlarge thereon in this place.

#### PLACER CLAIMS.

53. The tenth section of the act under consideration provides "that the act entitled 'An act to amend an act granting the right of way to ditch and canal owners over the public lands, and for other purposes,' approved July 9, 1870, shall be and remain in full force, except as to the proceedings to obtain a patent, which shall be similar to the proceedings prescribed by sections six and seven of this act for obtaining patents for vein or lode claims, but where said placer claims shall be upon surveyed lands and conform to legal subdivisions, no further survey or plat shall be required, and all placer mining claims hereafter located shall conform, as nearly as practicable, with the United States system of public land surveys and the rectangular subdivisions of such surveys, and no such locations shall include more than twenty acres for each individual claimant; but where placer claims cannot be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands," &c.

54. The proceedings for obtaining patents for veins or lodes having already been fully given, it will not be necessary to repeat them here; it being thought that careful attention thereto by applicants and the local officers will enable them to act understandingly in the matter and make such slight modifications in the notice, or otherwise, as may be necessary in view of the different nature of the two classes of claims, placer claims being fixed, however, at two dollars and fifty cents per acre, or fractional part of an acre.

55. The twelfth and thirteenth sections of said act of July 9, 1870, read as follows:

"SEC. 12. *And be it further enacted*, That claims, usually called 'placers,' including all forms of deposit, excepting veins of quartz, or other rock in place, shall be subject to entry and patent under this act, under like circumstances and conditions, and upon similar proceedings, as are provided for vein or lode claims: *Provided*, That where the lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands, no further survey or plat in such case being required, and the lands may be paid for at the rate of two dollars and fifty cents per acre: *Provided further*, That legal subdivisions of forty acres may be subdivided into ten-acre tracts; and that two or more persons, or associations of persons, having contiguous claims of any size, although such claims may be less than ten acres each, may make joint entry thereof: *And provided further*, That no location of a placer claim, hereafter made, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys; and nothing in this section contained shall defeat or impair any *bona fide* pre-emption or homestead claim upon agricultural lands, or authorize the sale of the improvements of any *bona fide* settler to any purchaser.

"SEC. 13. *And be it further enacted*, That where said person or association, they and their grantors, shall have held and worked their said claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto under this act, in the absence of any adverse claim: *Provided, however*, That nothing in this act shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property thereto attached prior to the issuance of a patent."

56. It will be observed that that portion of the first proviso to said twelfth section which requires placer claims upon surveyed lands to conform to legal subdivisions, is repealed by the present statute with regard to claims heretofore located, but that where such claims are located previous to survey and *do not* conform to legal subdivisions, survey, plat, and entry thereof may be made according to the boundaries fixed by local rules, but that where such claims *do* conform to legal subdivisions, the entry may be effected according to such legal subdivisions, without the necessity of further survey or plat.

57. In the second proviso to said twelfth section authority is given for the subdivision of forty-acre legal subdivisions into *ten-acre* lots, which is intended for the greater convenience of miners in segregating their claims both from one another and from intervening agricultural land.

58. It is held, therefore, that under a proper construction of the law these ten-acre lots in mining districts should be considered and dealt with, to all intents and purposes, as legal subdivisions, and that an applicant having a legal claim which conforms to one or more of these ten-acre lots, either adjoining or cornering, may make entry thereof, after the usual proceedings, without further survey or plat.

59. In cases of this kind, however, the notice given of the application must be very specific and accurate in description, and as the forty-acre tracts may be subdivided into



ten-acre lots, either in the form of squares of ten by ten chains, or of parallelograms five by twenty chains, so long as the lines are parallel and at right angles with the lines of the public surveys, it will be necessary that the notice and application state specifically what ten-acre lots are sought to be patented, in addition to the other *data* required in the notice.

60. Where the ten-acre subdivision is in the form of a square it may be described, for instance, as the "S. E.  $\frac{1}{4}$  of the S. W.  $\frac{1}{4}$  of N. W.  $\frac{1}{4}$ ," or, if in the form of a parallelogram as aforesaid, it may be described as the "W.  $\frac{1}{2}$  of the W.  $\frac{1}{2}$  of the S. W.  $\frac{1}{4}$  of the N. W.  $\frac{1}{4}$  (or the N.  $\frac{1}{2}$  of the S.  $\frac{1}{2}$  of the N. E.  $\frac{1}{4}$  of the S. E.  $\frac{1}{4}$ ) of section ———, township ———, range ———," as the case may be; but, in addition to this description of the land, the notice must give all the other *data* that is required in a mineral application, by which parties may be put on inquiry as to the premises sought to be patented.

61. The proceedings necessary for the adjustment of rights where a known vein or lode is embraced by a placer claim, are so clearly defined in the eleventh section of the act as to render any particular instructions upon that point at this time unnecessary.

62. When an adverse claim is filed to a placer application, the proceedings are the same as in the case of vein or lode claims, already described.

#### QUANTITY OF PLACER GROUND SUBJECT TO LOCATION.

63. By the twelfth section of the said amendatory act of July 9, 1870, (third proviso,) it is declared "that no location of a placer claim hereafter made shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys," &c.

64. The tenth section of the act of May 10, 1872, provides that "all placer mining claims hereafter located shall conform as near as practicable with the United States system of public land surveys, and the rectangular subdivisions of such surveys, and no such locations shall include more than twenty acres for each individual claimant."

65. The foregoing provisions of law are construed to mean that after the 9th day of July, 1870, no location of a placer claim can be made to exceed one hundred and sixty acres, whatever may be the number of locators associated together, or whatever the local regulations of the district may allow; and that from and after the passage of said act of May 10, 1872, no location made by an individual can exceed twenty acres, and no location made by an association of individuals can exceed one hundred and sixty acres, which location of one hundred and sixty acres cannot be made by a less number than eight *bona fide* locators, but that whether as *much* as twenty acres can be located by an individual, or one hundred and sixty acres by an association, depends entirely upon the mining regulations in force in the respective districts at the date of the location; it being held that such mining regulations are in no way enlarged by said acts of Congress, but remain intact and in full force with regard to the *size* of locations, in so far as they do not permit locations in excess of the limits fixed by Congress, but that where such regulations permit locations in excess of the maximums fixed by Congress as aforesaid, they are restricted accordingly.

66. The regulations hereinbefore given as to the manner of marking locations on the ground, and placing the same on record, must be observed in the case of placer locations, so far as the same are applicable; the law requiring, however, that where placer claims are upon *surveyed* public lands, the locations must hereafter be made to conform to legal subdivisions thereof.

67. With regard to the proofs necessary to establish the possessory right to a placer claim, the said thirteenth section of the act of July 9, 1870, provides that "where said person or association, they and their grantors, shall have held and worked their said claims for a period equal to the time prescribed by the statute of limitations for mining claims for the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto under this act in the absence of any adverse claim."

68. This provision of law will greatly lessen the burden of proof, more especially in the case of old claims located many years since, the records of which, in many cases, have been destroyed by fire, or lost in other ways during the lapse of time, but concerning the possessory right to which all controversy or litigation has long been settled.

69. When an applicant desires to make his proof of possessory right in accordance with this provision of law, you will not require him to produce evidence of location, copies of conveyances, or abstracts of title, as in other cases, but will require him to furnish a duly certified copy of the statute of limitations of mining claims for the State or Territory, together with his sworn statement giving a clear and succinct narration of the facts as to the origin of his title, and likewise as to the continuation of his possession of the mining ground covered by his application; the area thereof; the nature and extent of the mining that has been done thereon; whether there has been any opposition to his possession or litigation with regard to his claim; and if so, when the same ceased; whether such cessation was caused by compromise or by judicial decree, and any addi-



tional facts within the claimant's knowledge having a direct bearing upon his possession and *bona fides* which he may desire to submit in support of his claim.

70. There should likewise be filed a certificate under seal of the court having jurisdiction of mining cases within the judicial district embracing the claim, that no suit or action of any character whatever involving the right of possession to any portion of the claim applied for is pending, and that there has been no litigation before said court affecting the title to said claim or any part thereof for a period equal to the time fixed by the statute of limitations for mining claims in the State or Territory as aforesaid, other than that which has been finally decided in favor of the claimant.

71. The claimant should support his narrative of facts relative to his possession, occupancy, and improvements, by corroborative testimony of any disinterested person or persons of credibility who may be cognizant of the facts in the case, and are capable of testifying understandingly in the premises.

72. It will be to the advantage of claimants to make their proofs as full and complete as practicable.

#### APPOINTMENT OF DEPUTY SURVEYORS OF MINING CLAIMS—CHARGES FOR SURVEYS AND PUBLICATIONS—FEES OF REGISTERS AND RECEIVERS, ETC.

73. The twelfth section of the said act of May 10, 1872, provides for the appointment of surveyors of mineral claims, authorizes the Commissioner of the General Land Office to establish the rates to be charged for surveys and for newspaper publications, prescribes the fees allowed to the local officers for receiving and acting upon applications for mining patents and for adverse claims thereto, &c.

74. The surveyors general of the several districts will, in pursuance of said law, appoint in each land district as many competent deputies for the survey of mining claims as may seek such appointment; it being distinctly understood that all expenses of these notices and surveys are to be borne by the mining claimants and not by the United States; the system of making *deposits* for mineral surveys, as required by previous instructions, being hereby revoked as regards *field work*; the claimant having the option of employing *any* deputy surveyor within such district to do his work in the field.

75. With regard to the *platting* of the claim and other *office work* in the surveyor general's office, that officer will make an estimate of the cost thereof, which amount the claimant will deposit with any assistant United States treasurer, or designated depository, in favor of the United States Treasurer, to be passed to the credit of the fund created by "individual depositors for surveys of the public lands," and file with the surveyor general duplicate certificates of such deposit, in the usual manner.

76. The surveyors general will endeavor to appoint mineral deputy surveyors, as rapidly as possible, so that one or more may be located in each mining district for the greater convenience of miners.

77. The usual oaths will be required of these deputies and their assistants as to the correctness of each survey executed by them.

78. The law requires that each applicant shall file with the register and receiver a sworn statement of all charges and fees paid by him for publication of notice and for survey; together with all fees and money paid the register and receiver, which sworn statement is required to be transmitted to this office, for the information of the Commissioner.

79. Should it appear that excessive or exorbitant charges have been made by any surveyor or any publisher, prompt action will be taken with the view of correcting the abuse.

80. The fees payable to the register and receiver, for filing and acting upon applications for mineral land patents, made under said act of May 10, 1872, are five dollars to each officer, to be paid by the applicant for patent at the time of filing, and the like sum of five dollars is payable to each officer by an adverse claimant at the time of filing his adverse claim.

81. All fees or charges under this act, or the acts of which it is amendatory, may be paid in United States currency.

82. The register and receiver will, at the close of each month, forward to this office an abstract of mining applications filed, and a register of receipts, accompanied with an abstract of mineral lands sold.

83. The fees and purchase money received by registers and receivers must be placed to the credit of the United States in the receiver's monthly and quarterly account, charging up in the disbursing account the sums to which the register and receiver may be respectively entitled as fees and commissions, with limitations in regard to the legal maximum.

84. The thirteenth section of the said act of May 10, 1872, provides that all affidavits required under said act, or the act of which it is amendatory, may be verified before *any* officer authorized to administer oaths within the land district where the claims may be situated, in which case they will have the same force and effect as if



taken before the register or receiver, and that in cases of contest as to the mineral or agricultural character of land, the testimony and proofs may be taken before any such officer on personal notice of at least ten days to the opposing party, or if said party cannot be found, then, after publication of notice for at least once a week for thirty days, in a newspaper, to be designated by the register as published nearest to the location of such land, proof of which notice must be made to the register.

85. The instructions heretofore issued with regard to disproving the mineral character of lands are accordingly modified so as to allow proof upon *that point* to be taken before *any* officer authorized to administer oaths within the land district, and that where the residence of the parties who claim the land to be mineral is known, such evidence may be taken without publication, ten days after the mineral claimant or affiant shall have been personally notified of the time and place of such hearing; but in cases where such affiants or claimants cannot be served with personal notice, or where the land applied for is returned as mineral upon the township plat, or where the same is now or may hereafter be suspended for non-mineral proof, by order of this office, then the party who claims the right to enter the land as agricultural will be required, at his own expense, to publish a notice once each week for five consecutive weeks in the newspaper of largest circulation published in the county within which said land is situated, or if no newspaper is published within such county, then in a newspaper published in an adjoining county; the newspaper in either case to be designated by the register; which notice must be clear and specific, embracing the points required in notices under instructions from this office of March 20, 1872, and must name a day after the last day of publication of such notice, when testimony as to the character of the land will be taken, stating before what magistrate or other officer such hearing will be had, and the place of such hearing.

#### MILL SITES.

86. The fifteenth section of said act provides, "That where non-mineral land not contiguous to the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable under this act to veins or lodes: *Provided*, That no location hereafter made of such non-adjacent lands shall exceed five acres, and payment for the same must be made at the same rate as fixed by this act for the superficies of the lode. The owner of a quartz mill or reduction works, not owning a mine in connection therewith, may also receive a patent for his mill site as provided in this section."

87. To avail themselves of this provision of law, parties holding the possessory right to a vein or lode, and to a piece of land not contiguous thereto, for mining or milling purposes, not exceeding the quantity allowed for such purpose by the local rules, regulations, or customs, the proprietors of such vein or lode may file in the proper land office their application for a patent, under oath, in manner already set forth herein, which application, together with the plat and field notes, may include, embrace, and describe in addition to the vein or lode, such non-contiguous mill site, and after due proceedings as to notice, &c., a patent will be issued conveying the same as one claim.

88. In making the survey in a case of this kind, the lode claim should be described in the plat and field notes as "Lot No. 37, A," and the mill site as "Lot No. 37, B," or whatever may be its appropriate numerical designation; the course and distance from a corner of the mill site to a corner of the lode claim to be invariably given in such plat and field notes, and a copy of the plat and notice of application for patent must be conspicuously posted upon the mill site as well as upon the vein or lode for the statutory period of sixty days. In making the entry no separate receipt or certificate need be issued for the mill site, but the whole area of both lode and mill site will be embraced in one entry, the price being five dollars for each acre and fractional part of an acre embraced by such lode and mill site claim.

89. In case the owner of a quartz mill or reduction works is not the owner or claimant of a vein or lode, the law permits him to make application therefor in the same manner prescribed herein for mining claims, and after due notice and proceedings in the absence of a valid adverse filing, to enter and receive a patent for his mill site, at said price per acre.

90. In every case there must be satisfactory proof that the land claimed as a mill site is not mineral in character, which proof may, where the matter is unquestioned, consist of the sworn statement of the claimant, supported by that of one or more disinterested persons capable from acquaintance with the land to testify understandingly.

91. The law expressly limits mill site locations made from and after its passage to *five acres*, but whether so *much* as that can be located depends upon the local customs, rules, or regulations.

92. The registers and receivers will preserve an unbroken consecutive series of numbers for all mineral entries.



## PROOF OF CITIZENSHIP OF MINING CLAIMANTS.

93. The proof necessary to establish the citizenship of applicants for mining patents, whether under the present or past enactments, it will be seen by reference to the seventh section of the act under consideration, may consist, in the case of an individual claimant, of his own affidavit of the fact; in the case of an association of persons *not* incorporated, of the affidavit of their authorized agent, made on his own knowledge or upon information and belief, that the several members of such association are citizens; and in the case of an incorporated company, organized under the laws of the United States, or the laws of any State or Territory of the United States, by the filing of a certified copy of their charter or certificate of incorporation.

94. These affidavits of citizenship may be taken before the register or receiver, or any other officer authorized to administer oaths within the district.

95. Copies of the previous mining statutes of Congress, dated respectively July 26, 1866, and July 9, 1870, are hereto attached, sections one, two, three, four, and six of the former being expressly repealed by the ninth section of the act of May 10, 1872, aforesaid, which, in its sixteenth section, also repeals all acts and parts of acts inconsistent with its provisions.

96. The foregoing will be followed in due time by such further instructions as actual experience in the administration of the statute may render necessary.

Very respectfully, your obedient servant,

WILLIS DRUMMOND,  
Commissioner.

To REGISTERS and RECEIVERS, and SURVEYORS GENERAL.

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AN ACT granting the right of way to ditch and canal owners over the public lands, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the mineral lands of the public domain, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and occupation by all citizens of the United States, and those who have declared their intention to become citizens, subject to such regulations as may be prescribed by law, and subject also to the local customs or rules of miners in the several mining districts, so far as the same may not be in conflict with the laws of the United States. [Repealed.]

SEC. 2. *And be it further enacted,* That whenever any person, or association of persons, claim a vein or lode of quartz, or other rock in place, bearing gold, silver, cinnabar, or copper, having previously occupied and improved the same according to the local customs or rules of miners in the district where the same is situated, and having expended, in actual labor and improvements thereon, an amount of not less than one thousand dollars, and in regard to whose possession there is no controversy or opposing claim, it shall and may be lawful for said claimant, or association of claimants, to file in the local land office a diagram of the same so extended laterally or otherwise as to conform to the local laws, customs, and rules of miners, and to enter such tract and receive a patent therefor, granting such mine, together with the right to follow such vein or lode with its dips, angles, and variations to any depth, although it may enter the land adjoining, which land adjoining shall be sold subject to this condition. [Repealed.]

SEC. 3. *And be it further enacted,* That upon the filing of the diagram as provided in the second section of this act, and posting the same in a conspicuous place on the claim, together with a notice of intention to apply for a patent, the register of the land office shall publish a notice of the same in a newspaper published nearest to the location of said claim, and shall also post such notice in his office for the period of ninety days, and after the expiration of said period, if no adverse claim shall have been filed, it shall be the duty of the surveyor general, upon application of the party, to survey the premises and make a plat thereof, indorsed with his approval, designating the number and description of the location, the value of the labor and improvements, and the character of the vein exposed; and, upon the payment to the proper officer of five dollars per acre, together with the cost of such survey, plat, and notice, and giving satisfactory evidence that said diagram and notice have been posted on the claim during said period of ninety days, the register of the land office shall transmit to the General Land Office said plat, survey, and description, and a patent shall issue for the same thereupon. But said plat, survey, or description shall in no case cover more than one vein or lode, and no patent shall issue for more than one vein or lode, which shall be expressed in the patent issued. [Repealed.]

SEC. 4. *And be it further enacted,* That when such location and entry of a mine shall be upon unsurveyed lands, it shall and may be lawful, after the extension thereto of the public surveys, to adjust the surveys to the limits of the premises according to the location and possession and plat aforesaid; and the surveyor general may, in ex-



tending the surveys, vary the same from a rectangular form to suit the circumstances of the country and the local rules, laws, and customs of miners: *Provided*, That no location hereafter made shall exceed two hundred feet in length along the vein for each locator, with an additional claim for discovery to the discoverer of the lode, with the right to follow such vein to any depth with all its dips, variations, and angles, together with a reasonable quantity of surface for the convenient working of the same, as fixed by local rules: *And provided further*, That no person may make more than one location on the same lode, and not more than three thousand feet shall be taken in any one claim by any association of persons. [Repealed.]

SEC. 5. *And be it further enacted*, That as a further condition of sale, in the absence of necessary legislation by Congress, the local legislature of any State or Territory may provide rules for working mines involving easements, drainage, and other necessary means to their complete development; and those conditions shall be fully expressed in the patent.

SEC. 6. *And be it further enacted*, That whenever any adverse claimants to any mine, located and claimed as aforesaid, shall appear before the approval of the survey, as provided in the third section of this act, all proceedings shall be stayed until final settlement and adjudication, in the courts of competent jurisdiction, of the rights of possession to such claim, when a patent may issue as in other cases. [Repealed.]

SEC. 7. *And be it further enacted*, That the President of United States be, and is hereby, authorized to establish additional land districts, and to appoint the necessary officers under existing laws, wherever he may deem the same necessary for the public convenience in executing the provisions of this act.

SEC. 8. *And be it further enacted*, That the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted.

SEC. 9. *And be it further enacted*, That whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes aforesaid is hereby acknowledged and confirmed: *Provided, however*, That whenever, after the passage of this act, any person or persons shall, in the construction of any ditch or canal, injure or damage the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

SEC. 10. *And be it further enacted*, That wherever, prior to the passage of this act, upon the lands heretofore designated as mineral lands, which have been excluded from survey and sale, there have been homesteads made by citizens of the United States, or persons who have declared their intention to become citizens, which homesteads have been made, improved, and used for agricultural purposes, and upon which there have been no valuable mines of gold, silver, cinnabar, or copper discovered, and which are properly agricultural lands, the said settlers or owners of such homesteads shall have a right of pre-emption thereto, and shall be entitled to purchase the same at the price of one dollar and twenty-five cents per acre, and in quantity not to exceed one hundred and sixty acres; or said parties may avail themselves of the provisions of the act of Congress approved May twenty, eighteen hundred and sixty-two, entitled "An act to secure homesteads to actual settlers on the public domain," and acts amendatory thereof.

SEC. 11. *And be it further enacted*, That upon the survey of the lands aforesaid, the Secretary of the Interior may designate and set apart such portions of the said lands as are clearly agricultural lands, which lands shall thereafter be subject to pre-emption and sale as other public lands of the United States, and subject to all the laws and regulations applicable to the same.

Approved July 26, 1866.

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AN ACT to amend "An act granting the right of way to ditch and canal owners over the public lands, and for other purposes."

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the act granting the right of way to ditch and canal owners over the public lands, and for other purposes, approved July twenty-six, eighteen hundred and sixty-six, be, and the same is hereby, amended by adding thereto the following additional sections, numbered twelve, thirteen, fourteen, fifteen, sixteen, and seventeen, respectively, which shall hereafter constitute and form a part of the aforesaid act:

SEC. 12. *And be it further enacted*, That claims, usually called "placers," including all forms of deposit, excepting veins of quartz, or other rock in place, shall be subject to entry and patent under this act, under like circumstances and conditions, and upon similar proceedings, as are provided for vein or lode claims: *Provided*, That where the



lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands, no further survey or plat in such case being required, and the lands may be paid for at the rate of two dollars and fifty cents per acre: *Provided further*, That legal subdivisions of forty acres may be subdivided into ten-acre tracts; and that two or more persons, or associations of persons, having contiguous claims of any size, although such claims may be less than ten acres each, may make joint entry thereof: *And provided further*, That no location of a placer claim, hereafter made, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys; and nothing in this section contained shall defeat or impair any *bona fide* pre-emption or homestead claim upon agricultural lands, or authorize the sale of the improvements of any *bona fide* settler to any purchaser.

SEC. 13. *And be it further enacted*, That where said person or association, they and their grantors, shall have held and worked their claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto under this act, in the absence of any adverse claim: *Provided, however*, That nothing in this act shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property thereto attached prior to the issuance of a patent.

SEC. 14. *And be it further enacted*, That all *ex parte* affidavits required to be made under this act, or the act of which it is amendatory, may be verified before any officer authorized to administer oaths within the land district where the claims may be situated.

SEC. 15. *And be it further enacted*, That registers and receivers shall receive the same fees for services under this act as are provided by law for like services under other acts of Congress; and that effect shall be given to the foregoing act according to such regulations as may be prescribed by the Commissioner of the General Land Office.

SEC. 16. *And be it further enacted*, That so much of the act of March third, eighteen hundred and fifty-three, entitled "An act to provide for the survey of the public lands in California, the granting of pre-emption rights, and for other purposes," as provides that none other than township lines shall be surveyed where the lands are mineral, is hereby repealed. And the public surveys are hereby extended over all such lands: *Provided*, That all subdividing of surveyed lands into lots less than one hundred and sixty acres may be done by county and local surveyors at the expense of the claimants: *And provided further*, That nothing herein contained shall require the survey of waste or useless lands.

SEC. 17. *And be it further enacted*, That none of the rights conferred by sections five, eight, and nine of the act to which this act is amendatory shall be abrogated by this act, and the same are hereby extended to all public lands affected by this act; and all patents granted, or pre-emption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights as may have been acquired under or recognized by the ninth section of the act to which this act is amendatory. But nothing in this act shall be construed to repeal, impair, or in any way affect the provisions of the "Act granting to A. Sutro the right of way and other privileges to aid in the construction of a draining and exploring tunnel to the Comstock lode, in the State of Nevada," approved July twenty-fifth, eighteen hundred and sixty-six.

Approved July 9, 1870.

### *Tunnel claims.*

The fourth section of the mining statute of May 10, 1872, is as follows, viz:

SEC. 4. That where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins on the line of said tunnel.

Some differences of opinion existed among parties in interest as to the correct construction of this section of the law, and it was decided by this office, in response to certain inquiries on the subject, that the



*line* of the tunnel is the *width* thereof, and no more, and that upon *this line* only is prospecting for blind lodes prohibited while the working of the tunnel is in progress, and the right is granted to the tunnel owners to fifteen hundred feet of each blind lode, not previously known to exist, which may be discovered *in such tunnel*, but that other parties are in no way debarred from prospecting for blind lodes or running tunnels so long as they keep without the *line of the tunnel* as herein defined; the said line being required by regulations to be marked on the surface by stakes or monuments placed along the same from the face, or point of commencement, to the terminus of the tunnel line aforesaid. When a lode is struck or discovered for the first time by running a tunnel, the tunnel owners have the option of recording their claim of fifteen hundred feet all on *one* side of the point of discovery or intersection, or partly upon one and partly upon the other side thereof, but in no case can they so record a claim as to absorb the actual or constructive claim or possession of other parties on a lode which has been discovered and claimed *outside the line* of the tunnel, before the discovery thereof in the tunnel.

*Expenditures in running a mining tunnel, before a lode is struck therein, not tantamount to expenditures on the lode.*

The question being officially presented whether the fact of a company running a tunnel intended to develop several known parallel lodes claimed by them would relieve such company from the legal amount of labor or expenditure required to hold *each lode*, the matter was submitted to the head of the Department for his instructions, the views of this office in the premises being expressed in effect as follows, viz: Previous to the passage of the mining act of July 26, 1866, (14 Statutes, 251,) upon the discovery of mineral bearing veins or lodes in any portion of the public domain, the miners in the locality would at once call a meeting and adopt a code of laws or regulations governing the length of claims upon lodes, and the width of surface ground which might be taken therewith; the amount of work or expenditure necessary to be made annually upon each claim, in order to hold it and prevent it from being subject to relocation; fix the boundaries of the district within which these regulations should be enforced; provide for the election of a recorder of mining claims for such district, &c.

In the great number of mining districts thus found in the public domain the regulations adopted, although preserving a similarity in some leading points, differed materially in others. For instance, while the regulations of one district permitted an individual to locate three hundred feet on the course or strike of the lode, another district would allow but two hundred feet to be taken, and another district perhaps still less. Like differences existing with regard to the width of surface ground taken for the convenient working of the lode, and the amount of labor necessary to be done, or improvements made thereon, to hold one of these "claims" or "locations" for a specified time. After these claims or locations had been taken up and recorded at the mining recorder's office, they became the property of the locators, and could, under all the mining regulations, be bought and sold as real estate; the courts of the mineral States and Territories recognizing these titles as good and sufficient as against all persons and powers, except the United States, the purchaser of one of these possessory claims assuming the same obligations to do the annual amount of labor, or make the expenditure necessary to hold the claim so purchased, as the district laws required of his



predecessor in interest; a failure to do which subjected the claim to re-occupation by others.

These local regulations have constituted the miners' laws, and have formed the basis of miners' titles since the first discoveries of the precious metals in the public domain.

The congressional mining statute of July 26, 1866, (14 Statutes, 251,) was the first general legislation by that body looking toward the disposal of these carefully reserved mineral lands, and it being the policy of Congress to disturb as little as possible the existing order of things in the mining regions, said enactment provided the means by which these possessory rights, having their inception under district regulations, could be converted into complete titles by patent from the United States; one of the conditions, precedent to the sale of a mining claim by the United States, being that the applicant for title must have previously occupied and improved his claim in accordance with the local customs and rules of the mining district in which it was situated. Said act, in its fourth section, fixed a limit for claims on all veins or lodes from and after its passage, which limit could not be exceeded, no matter what the local regulations allowed; said congressional maximum being 200 feet along the course of the lode to each locator, with an additional claim of 200 feet for discovery to the discoverer of the lode, and fixed 3,000 feet as the utmost extent that could be located or claimed upon the same by any association of persons after the 26th July, 1866.

The General Land Office has always construed these limitations to mean that, after the 26th of July, 1866, no individual, in any district, could "locate" or "claim" more than 200 feet on the course of any lode discovered thereafter, unless he was the discoverer, when he could take an extra claim of 200 feet, and that not more than 3,000 feet could thereafter be located or claimed upon any one vein by any association of persons, and that to locate 3,000 feet of such lode would require not less than fourteen *bona fide* locators to be associated together, each taking a claim of 200 feet, with 200 feet additional to the discoverer, or fifteen locators where they claim without regard to the discovery right.

In making these locations the miners had the option of taking up and recording their claims either as segregated individual locations of 200 feet each, and working or disposing of them as such, or they could associate together and locate a number of these claims in common, provided the legal maximum of 3,000 feet was not exceeded after the 26th of July, 1866. The said statute of July 26, 1866, did not fix any amount of work or expenditure as necessary to hold a claim, but left that to be regulated by the miners themselves. Congress did, however, prescribe that an amount of not less than \$1,000 should be expended on the claim as one of the conditions precedent to obtaining a patent.

The mining statute of May 10, 1872, repeals said act of July 26, 1866, in part, and after its passage permits 1,500 linear feet to be located as one claim on a lode, which location may be made by an individual or by an association of persons jointly; but no lode claim located after the passage of said act of May 10, 1872, can exceed 1,500 feet, whether located by one or more persons.

The fifth section of said statute of 1872 provides, among other things, that—

On each claim located after the passage of this act, and until a patent shall have been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year.

And that—

On all claims located prior to the passage of this act, ten dollars' worth of labor shall



be performed or improvements made each year for each one hundred feet in length along the vein until a patent shall have been issued therefor; but where such claims are held in common, such expenditure may be made upon any one claim, &c.

The only interpretation this office has been able to give this language is, that a "claim" on a lode located subsequent to May 10, 1872, may be 1,500 feet and no more, whether located by one or more persons, and that to hold such claim of 1,500 feet will require an annual expenditure of \$100 *thereon*, and that on all lodes located prior to May 10, 1872, there must be an annual expenditure of not less than ten dollars in labor or improvements for each hundred feet so claimed along the lode, but that where a number of such claims of one hundred or two hundred feet each, as the case may be, *upon the same lode* are held in common by one or more persons, the aggregate amount necessary to hold all the *claims* so held in common on a lode, at the rate of ten dollars per hundred feet, may be expended upon any one *claim* thereon, or, in other words, at any one point on the lode so held in common; the words "where such claims are held in common, such expenditure may be made on any one claim," being construed to mean that where several of these individual locations made previous to May 10, 1872, *upon the same lode* are held in common by one or more persons, the entire expenditure necessary to hold all the claims so held in common on such lode may be made upon *any one claim* thereon, but that expenditures made upon any one lode or claim, however great, can in no way be made to apply to other lodes claimed by the same parties.

In the case under consideration a certain mining company are the claimants of nine separate lodes, all of which it is their purpose to develop and improve by a mining tunnel now being run in order to intersect such lodes below the surface.

If this interpretation of the law is correct, work done and expenditures made in constructing a tunnel *intended* for the development and improvement of lodes will not satisfy the legal requirement as to expenditure as aforesaid; but such expenditure or labor must be made in good faith *upon each lode claimed*, otherwise the same will be subject to relocation by other parties, as provided by law.

The foregoing views of the law, coinciding with those of the Department, were approved.

#### 15. PRIVATE LAND CLAIMS.

In my last report, attention was called to the surveys of private land claims in California, and it was suggested, in view of the stipulations of the eighth and ninth articles of the treaty of Guadalupe Hidalgo, that the provisions of the third section of the act approved May 30, 1862, (12 Statutes, p. 409,) relative to the payment by claimants of the expenses of surveying their ranchos, be repealed. The experience of the past year has confirmed me in the opinion there expressed, and I deem it my duty again to urge upon the attention of Congress the necessity and propriety of repealing the section above named.

Among the grants made in California by the Mexican authorities many were for a specified number of square leagues within larger exterior boundaries, and where these grants have been confirmed by the United States the confirmees may select in a compact form the area of their grant anywhere inside the limits of such boundaries. Until such selection has been made and surveyed, the excess, often thousands of acres of excellent land, which belongs to the United States, cannot be known or disposed of to settlers who may desire to acquire title thereto. And, although a settler may cultivate lands of this description for years



before the Mexican grant has been segregated, and though he may add to their value by costly improvements, he can have no assurance that his improved lands will not eventually be included by the grant owners in the selection to which they are entitled. And to a certain extent the same difficulty presents itself in cases where the unsurveyed ranchos include all the land within given boundaries, the calls of these grants being often so vague that, until finally settled by survey and patent, no settler can acquire a home near the limits of any one of them and be confident that he is not a trespasser upon what may be finally found to be a private claim, protected by treaty stipulation and a confirmation by the United States. As under existing laws no survey can be made of a private claim in California until the cost thereof shall have been deposited by the claimant or claimants, the time of the adjustment of these claims is substantially under the control of private parties; and as claimants are sometimes unable to make the deposit, and sometimes unwilling to surrender the use of the excess of land from which they will be excluded upon the adjustment of the limits of their grants, these claims remain unsettled year after year, to the great injury of the public.

A repeal of the section above referred to, and a sufficient appropriation by Congress to enable the surveyor general of California to proceed at once to survey the private land claims in that State, would, in my opinion, remove many of the difficulties heretofore encountered, and materially advance the settlement of the vexed questions growing out of such Spanish and Mexican grants. The additional expense to the Government would be trivial when compared with the benefits that would accrue from an early adjustment of the claims of this character.

During the year ending June 30, 1872, the surveys of sixteen private land claims in California were received here from the United States surveyor general, and during the same year patents for thirty-six private land claims in that State were prepared by this office and transmitted for delivery to the parties entitled thereto.

Since the date of my last report, the ruling of this office relative to the issue of patents for public lands in California has been changed by the following letter from the honorable Secretary of the Interior:

DEPARTMENT OF THE INTERIOR,  
Washington, D. C., February 15, 1872.

SIR: I have received your letter of the 10th instant, in which you state that your immediate predecessor held that the act of March 3, 1851, (9 Statutes, 631,) did not authorize the issuing of patents to municipal corporations or other bodies or parties entitled to pueblo lands in California, the survey of which had been finally approved by the proper officials. You intimate a doubt as to the correctness of that construction of the act, and desire an expression of opinion from the Department.

I have carefully considered the subject, and am of opinion that patents should issue to such corporations or other bodies or persons as are entitled to pueblo lands, the survey of which has been finally approved by the proper officers.

The thirteenth section provides that, for *all claims* finally confirmed, a patent shall issue to the claimant upon his presenting an authentic certificate of such confirmation, and a survey duly certified and approved by the surveyor general.

The fourteenth section makes some exceptions to this rule, but does not provide that a patent shall not issue to the proper parties entitled to the pueblo lands.

It does provide that the provisions of the act shall not apply to any town lot, farm lot, or pasture lot, held under a grant from any corporation or town to which lands may have been granted for the establishment of a town by the Spanish or Mexican government, or the lawful authorities thereof, nor to any city, or town, or village lot, which city, town, or village existed on the 7th day of July, 1846, and requires in all such cases that the claim for such lands shall be presented by the corporate authorities of the town, or where the land on which the city, town, or village is situated was originally granted to an individual, that the claim shall be presented by the individual.



This section was intended to point out who, in the cases therein mentioned, should present the claims to the board.

When presented, as pointed out in said section, the claims were to be treated like any other claims, and if confirmed and duly surveyed, were to be patented.

I think there can be no doubt that this was the intention of the law makers.

You will hereafter follow this construction.

Very respectfully,

B. R. COWEN,  
*Acting Secretary.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office.*

Particular attention is called to the condition of private land claims within the limits of the remainder of the territory acquired by the treaty of Guadalupe Hidalgo, and within the limits of the territory acquired by the treaty commonly known as the Gadsden purchase.

During the last session of Congress, this office submitted for the settlement of these claims a draught of a bill that, in my opinion, contains all the best features of the laws passed for the settlement of similar claims in California, together with certain additions which experience has suggested, and which it is believed will advance the interests of claimants and protect those of the United States. The inadequacy of the laws now in force for this purpose is well known, and justice to the meritorious class of claimants who hold private claims in said territories under grants properly acquired from the former government, requires that they be provided with a more speedy means of perfecting their titles than they are now afforded.

From the history of private land claims in other localities we may reasonably infer that all delay in the final adjustment of like claims in the territory now under consideration will increase the number, and render more difficult the detection of parties who present claims under forged or fraudulent title papers with the view of securing confirmations therewith. And it may be added that with the completion of railroads now being built or projected, and with other material improvements constantly developing the resources and adding to the wealth of that country, land now comparatively worthless will become valuable, and the incentive for manufacturing fraudulent papers of this character will be correspondingly augmented.

The act of Congress approved July 22, 1854, (10 Statutes, p. 308,) authorizes the surveyor general of New Mexico to examine and report upon certain claims to land acquired from the Spanish or Mexican authorities in that part of New Mexico ceded to the United States by the treaty of Guadalupe Hidalgo, in 1848, and by a subsequent act, approved August 4 of the same year, it was enacted, "That until otherwise provided by law the territory acquired under the late treaty with Mexico, commonly known as the Gadsden treaty, be, and the same is hereby, incorporated with the Territory of New Mexico, subject to all the laws of said last mentioned Territory." Under these acts it was held by this office that the surveyor general of New Mexico had no jurisdiction to examine private land claims within the limits of the territory acquired by the treaty last cited, the laws of New Mexico applied thereto by the act of August 4, 1854, being understood to mean local territorial laws, and not acts of Congress; but this ruling has been changed by the following letter from the honorable Secretary of the Interior:

DEPARTMENT OF THE INTERIOR,  
*Washington, D. C., February 17, 1872.*

SIR: I have considered the question submitted by you in your letter of the 10th instant as to the power of the surveyor general of New Mexico to investigate and re-



port upon private land claims within the territory acquired from Mexico by the Gadsden treaty of 1853.

The eighth section of the act of July 22, 1854, (10 Statutes, page 309,) made it the duty of the surveyor general of New Mexico, under instructions from the Secretary of the Interior, to ascertain the origin, nature, character, and extent of all claims to land under the laws, usages, and customs of Spain and Mexico, and for that purpose gave him authority to issue notices, summon witnesses, administer oaths, and to do and perform all other necessary acts in the premises.

It required him to make a full report to the Secretary of the Interior of all such claims as originated before the cession of the territory to the United States by the treaty of Guadalupe Hidalgo, with his decision as to the validity or invalidity of each of the same under the laws, usages, and customs of the country before its cession to the United States.

It required the Secretary of the Interior to lay such report before Congress, for its action, with a view to confirm *bona fide* grants, and give full effect to the treaty, and until the final action of Congress all lands covered by such claims were reserved from sale or other disposal by the Government.

On the 4th of August, 1854, Congress passed an act (10 Statutes, page 575,) which provided "that, until otherwise provided by law, the territory acquired under the late treaty with Mexico, commonly known as the Gadsden treaty, be, and the same is hereby, incorporated with the Territory of New Mexico, subject to all the laws of said last named Territory."

What laws are here referred to as "the laws of said last named Territory?"

Are they the laws passed by the territorial legislature of New Mexico, or the laws passed by Congress for the Territory of New Mexico, or both?

By the Gadsden treaty we acquired a portion of Mexican territory.

It became necessary to provide for it a system of laws.

It adjoined the Territory of New Mexico, which had such a system. Congress saw fit to attach it to that Territory, and make it subject to all its laws.

I think the phrase, "all the laws of said last named Territory," should be construed to mean all the laws applicable to that Territory, no matter whether such laws were passed by the territorial legislature or by Congress.

In either case they are the laws of the Territory, the laws to which the Territory is subject.

This construction renders all the territory acquired by the Gadsden treaty subject to all the laws governing New Mexico, and of course to the eighth section of the act of July 22, 1854, unless since the passage of that act the whole or some portion thereof has been "otherwise provided by law."

A portion has been thus "otherwise provided for." It has been incorporated into the Territory of New Mexico, (12 Statutes, 664.)

A surveyor general has been given to it, (12 Statutes, 664; 16 do: 230,) and he has been clothed with all the powers given to the surveyor general of New Mexico, by the eighth section of the act of July 22, 1854, (16 Statutes, 304, sec. 1,) so that as to that portion of the Gadsden purchase now incorporated into the Territory of Arizona, it is very clear that the surveyor general of New Mexico has no jurisdiction and no power to examine into or report upon any private land claims.

As to the balance of the purchase, being that portion now remaining incorporated into the Territory of New Mexico, I am of opinion that he has such power under the eighth section of the act of July 22, 1854, and the act of August 4, 1854, and you will govern your action in accordance with this opinion.

Very respectfully,

C. DELANO,  
Secretary.

Hon. WILLIS DRUMMOND,  
Commissioner General Land Office.

By the first section of an act approved June 10, 1872, Congress extended for three years, from the date of the passage of said act, the provisions of an act approved June 22, 1860, (12 Statutes, 85,) entitled "An act for the final adjustment of private land claims in the States of Florida, Louisiana, and Missouri, and for other purposes;" and by the second section it was enacted that all persons claiming lands as specified in the first section of the act of July 22, 1860, "may have their claims confirmed in accordance with the forms and in the manner prescribed in said act, in all cases where it shall be satisfactorily proved that the claimants, and those from whom they derive title, have held continuous possession of the land claimed from the date of the cession



to the United States of the territory out of which the States of Florida, Louisiana, and Missouri were formed."

Under these acts this office has forwarded to the registers and receivers of Louisiana and Florida, and to the recorder of land titles at Saint Louis, Missouri, the following instructions:

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,  
Washington, D. C., July 18, 1872.

GENTLEMEN: I inclose herewith a copy of an act of Congress, approved June 10, 1872, entitled "An act to extend the provisions of an act entitled 'An act for the final adjustment of private land claims in the States of Florida, Louisiana, and Missouri, and for other purposes,'" by virtue of which you are authorized, as commissioners, to hear and decide, under instructions from this office, all matters respecting such claims to land within your district as come within the provisions of the act of June 22, 1860, as extended and amended by this act.

The first section extends the provisions of the act of 22d June, 1860, for three years from and after the passage of this act.

The second section provides that "all persons claiming lands as specified in the first section" of the act of June 22, 1860, "may have their claims confirmed *in accordance with the forms and in the manner prescribed in said act* in all cases where it shall be satisfactorily proved that the claimants, and those from whom they derive title, have held continuous possession of the land claimed from the date of the cession to the United States of the territory out of which the States of Florida, Louisiana, and Missouri were formed."

As the only lands specified by the first section of the act of 1860 are private land claims, lying within the States named, and claimed "by virtue of grant, concession, order of survey, permission to settle, or other written evidence of title," it is evident that Congress, by said section, did not intend to enlarge the classes of claims mentioned in the act of 1860, but simply to vary the proof required, so as to afford relief to claimants whose written evidence of title, properly acquired from the former government, had been lost or destroyed. You will, therefore, require, in all cases presented under this section, satisfactory proof—

1. That the land for which confirmation is sought was acquired by virtue of grant, concession, order of survey, permission to settle, or other written evidence of title emanating from the French, Spanish, or British governments. This fact must be established, in all cases, by the production of the original title papers, unless it shall be proven that said title papers have been lost or destroyed, in which case parol evidence of their contents may be admitted.

2. That the claimants, or those from whom they derive title, have held continuous possession of the land claimed from the date of the cession to the United States of the territory out of which the States of Florida, Louisiana, and Missouri were formed, which date, for the States of Louisiana and Missouri, is the 30th day of April, 1803, and for the State of Florida, the 22d day of February, 1819. (See *United States vs. Lynd's Heirs*, 11 Wallace, page 632.)

The proof of possession in claims presented under this section should be full and explicit, showing not only the date when such possession was taken, but also the character of such possession, and any other facts by which the good faith of the claimant may be shown.

Where not modified by the second section of this act and this letter, the act of June 22, 1860, and our instructions (copy herewith) of October 25, 1860, relative to claims under said act, will guide your investigations of claims presented under this act.

WILLIS DRUMMOND,  
Commissioner.

TO REGISTERS AND RECEIVERS.

Approved:

C. DELANO,  
Secretary of the Interior.

GENERAL LAND OFFICE, October 25, 1860.

GENTLEMEN: By act of Congress approved June 22, 1860, entitled "An act for the final adjustment of private land claims in the States of Florida, Louisiana, and Missouri, and for other purposes," you are appointed commissioners to hear and decide, under instructions from this office, all matters respecting such claims to land within your district as come within the provisions of said act.

You will observe that this act confers power upon you to receive such claims only as are founded on *written* title, and hence you have no authority to receive, or act upon



any claim founded on ancient settlement merely, where the same is unaccompanied by such written title from the authorities of the former government.

You are authorized to receive and act upon such claims for tracts within your district as have emanated from any foreign government bearing date prior to the cession to the United States of the territory out of which said States were formed, or during the period when any such government claimed sovereignty, or had the actual possession of the district or territory in which the lands so claimed are situated.

This warrants you in receiving and acting upon claims which originated under the former governments, where they exercised the granting power *de jure*, and before such government had ceded the country, and those made by the Spanish authorities while in actual occupancy of territory held by them as the government *de facto*. Thus, for example: Spain parted with her legal authority over the province of Louisiana by the secret treaty of 1800, at San Ildefonso; Spain ceded Louisiana to France, and during the period that elapsed from that time to the cession to the United States in 1803, by Napoleon, the Spanish authorities exercised the granting power, and so, several years subsequent to 1803, Spain, while in occupancy of the portion of the ancient province of Louisiana between the Iberville, or Manchac, and the Perdido, exercised the granting power, and during this period her grants were those of the government *de facto*.

Your attention is particularly directed to the first, second, third, seventh, eighth, ninth, and tenth sections of this act.

SECTION 1. Under this section you will receive all applications of persons, or their legal representatives, having the right to claim under the provisions of the act; also, the evidence of claim, abstract of title, plat of survey, and the sworn statement required by the act. Should there be any conflict, your decision should carefully show the nature and extent of interference, whether by grant, sale, or location; and a complete record should be made of all the papers, in the order above mentioned, including your decision, in a substantial book kept for the purpose.

The cases will bear on the record a regular series of numbers, in the order in which they may be recorded, and after record the papers will be properly filed and retained in your office until otherwise directed.

SECTION 2. By this section you are authorized "to hear and decide, under such instructions as may be prescribed by the Commissioner of the General Land Office, in conformity with this act, and according to justice and equity and the principles" thereafter "established, in a summary manner, all matters respecting such claims within the districts aforesaid as come within the provisions of this act;" "to administer oaths, compel the attendance of and examine witnesses," &c. The expense of procuring witnesses must be borne by the claimants, as the act makes no provision for their payment; and in case it may be found necessary to *compel the attendance* of witnesses, you will avail yourselves of the services of the United States marshal for that purpose. This section also provides for a final report to this office upon the claims presented, in which they shall be arranged in separate classes, as directed by the following section, viz:

SECTION 3. The classification will be in the following manner:

The classes will bear the following captions:

"Class No. 1. Twenty years' possession and cultivation claims, which, in the opinion of the commissioners, ought to be confirmed."

"Class No. 2. Claims where there is no actual possession and cultivation for the period mentioned, but which, in the opinion of the commissioners, ought to be confirmed."

"Class No. 3. Claims which, in the opinion of the commissioners, ought to be rejected."

Each class will be arranged, in tabular form, under the following heads:

The first column will contain the "Number of the claim," according to the record referred to under section 1; the second, the "Name of claimant;" third, "Derivation of title;" fourth, "Possession and cultivation," showing beginning and end of same; fifth, "Date of filing," before you; sixth, "Description," which should be by legal divisions and subdivisions, where the lands have been surveyed by the United States, with column of "Remarks," distinctly designating interferences by sale or otherwise, with particulars as to dates, names of conflicting claimants, &c.

SECTION 7. Requires that the facts reported as proven by any former board of commissioners, acting under authority of Congress, "shall be taken as true *prima facie*, and the evidence offered before such former board, and remaining of record, shall be admitted on the examination of the claims made under the provisions of this act."

In admitting such evidence you will be careful to state its substance, referring to the record where it may be found, if in the reports of former boards; and if in the State Papers, to the volume and page of same—Duff Green's edition, in five volumes.

SECTION 8. The effect of this section is to withdraw from sale or location all lands claimed under the provisions of this act, immediately upon a claim being properly and legally filed for the same, with a plat showing, in connection with the public surveys,



its precise locality and limits. It will, therefore, be your duty to examine carefully all applications for claims, and note the same, in order that the lands covered thereby may be protected from interference; and in any case where the lands so claimed have been hitherto deemed to be public lands, you will report the fact immediately to this office and furnish a copy of the plat, with the name of claimant and character of title. You will note on the face of such report, beginning with No. 1, as follows: "Report No. —, under 7th Sec : Act 22d June, 1860."

SECTION 10. Contemplates an annual report to Congress, by this office, of the progress of the work under this act.

To enable us to make such report, an annual statement will be required of you, after the present year, on or about the 15th September, during the period the act remains in operation, which is limited to five years. With such statement you should send up a transcript of the record, contemplated in the first section of the act, which should be accompanied by an index.

Very respectfully, your obedient servant,

JOS. S. WILSON,  
*Commissioner.*

REGISTER and RECEIVER.

It is believed that under the very liberal provisions of these acts all claimants having just private land claims within the territory above named will be afforded an opportunity to perfect their titles, and thus enable this office to so segregate invalid claims that they may be disposed of as public land without injury to parties equitably entitled to part thereof.

#### 16. TREE CULTURE.

The necessity and propriety of the adoption of some measure by Congress to promote tree culture, and thereby remove the obstacles to the advance of settlements in prairie districts, will be admitted by all who have traveled over the treeless plains of the great West. This question has engaged the attention of citizens and legislators, and many plans for the encouragement of tree planting have been considered and discussed, but little of a practical character has been done, and that little of a local instead of a general nature. After a careful consideration of the question, I am convinced that practical and valuable results would be attained by an amendment of the homestead law, requiring each settler, who may avail himself of its benefits, to plant and cultivate for a period of not less than three years a number of acres of trees proportioned to the quantity of land embraced in his entry, and to submit satisfactory proof of that as one of the conditions necessary to entitle him to a patent.

Respectfully submitted.

WILLIS DRUMMOND,  
*Commissioner.*

The Hon. SECRETARY OF THE INTERIOR.



*A.—Report of the surveyor general of Louisiana.*

OFFICE OF SURVEYOR GENERAL, DISTRICT OF LOUISIANA,  
New Orleans, September 17, 1872.

SIR: In compliance with your instructions of April 5, 1872, I have the honor to submit the annual report of this office, in duplicate, with the usual tabular statements, (A, B, C, D, E, F, G, H, and I,) and a map of the State.

## FIELD WORK.

The surveys contracted under the appropriation for the fiscal year of 1870-'71, (Statement A,) were not undertaken until the commencement of the following year, one of the contracts having been extended to cover this period on account of the unfavorable character of that season, and the other not having been awarded until near the close of that year.

The field notes of one township and parts of others were returned by Mr. Hauké, but owing to his death, which occurred, as I am informed, immediately after the completion of his work, the returns of the remaining townships included in his contract have not been received.

The field work undertaken by Messrs. Ross and Sulakowski for the survey of the townships that embrace the cities of New Orleans and Carrollton has been completed, and too much praise cannot be bestowed upon these deputies for the faithful and successful accomplishment of that most intricate and difficult work. The extraordinary changes in the physical geography of the locality consequent upon the building of a large city with its straight streets and rectangular squares, intersecting at all possible angles the boundaries of the old private land claims of French and Spanish origin made in the past century, when the city was only a fortified town of a few hundred inhabitants, and the surrounding country plantations fronting on the bend of the Mississippi River and Bayous Metairie, Saint John, and Gentilly, and extending back into worthless swamps; this of itself would necessarily make the retracing of old lines and boundaries a work of great difficulty. But when consideration is given to the confusions and interferences of grants, the irregularity in their form and extent, the vagueness of the terms used in describing concessions, as well as in the language of certificates of confirmation issued by the boards of commissioners, the difficulty of locating original fronts of the tracts adjoining the Mississippi, occasioned by the continuous accretion to its bank for a hundred years, whereby a large area of land has been added to the most valuable part of the city, the necessity for great precision and accuracy on account of the enhancement in value of real estate, and the magnitude and importance of the judicial issues affected by this survey, which have been and still are occupying the attention of our highest tribunals, and the destruction or abstraction from the files of this and the land office of many important records which formed the basis of action, and reports of land commissioners in confirming private land claims, necessitating the transcription and translation of original documents from the records of ancient French and Spanish archives, it is only then that a proper estimate can be made of the amount, nature, and importance of the work performed under this contract. I beg to report that these deputies are entitled to great credit for their perseverance, patience, and energy.

The surveying contracts based upon the appropriation of March 3, 1871, have, as a general remark, progressed satisfactorily. On account of the difficulty of gaining access to the Sabine military reservation and the indisposition of the deputy, the contract for that survey was allowed to expire without accomplishing the work. The field work, under contracts numbered 2, 3, 5, 6, 7, 10, 11, and 12, have been completed, and the condition of the others is fully explained in Statements B and C.

## OFFICE WORK.

The labor devolving upon the office in this district is generally of a peculiar character. Scarcely a township is surveyed that does not contain many private land claims, some of them diminutive and others extensive in size, and it is frequently found necessary, in addition to furnishing deputies with transcripts of field notes and copies of maps, certificates of confirmation, &c., &c., to give special instructions regarding the location of certain claims requiring much research and attentive labor. The clerical and mathematical labor and the preparation of the maps of the recent survey of New Orleans townships required the employment of an experienced computer and a competent draughtsman for at least four months. Besides this strictly clerical labor, after a survey is completed and the field notes returned, a thorough comparison of the same with the several reports of land commissioners is necessary, not only to determine the correctness of the work, but to ascertain whether some valid claims are not left unlocated, which frequently happens.



The act of Congress of June 2, 1858, imposes other duties on this office, requiring not only carefulness and vigilance in the execution of the provisions of the act, but the complicated questions constantly arising therefrom demand the exercise of sound legal knowledge and judgment.

In investigating some of the first applications for relief under this act I became impressed with the idea that many of the claims represented upon the abstracts of confirmed unlocated claims in the files of this office were simply reconfirmations of claims already located and satisfied, and that others were really excluded from confirmation by the restricting and limiting provisions of the act of Congress by which it was claimed that they were confirmed. I therefore requested that the original papers, "proofs of claims," "notices," "evidence of title," "controversies," &c., &c., contained in the files of the late Greensburgh land district be transferred to this office, so that recourse could be easily had to this original evidence, and the merits of each claim be investigated from its foundation. These papers, although not formally turned over to this office, have been, through the courtesy of the register, placed in my hands. I found them in extreme confusion, being bound in packages regardless alike of their contents or dates, and without attempting any systematic arrangement of this heterogeneous mass of important information. Work was at once commenced upon such as referred to settlement claims in the late Greensburgh land district by carefully reading each document and placing in alphabetical index the name of every person written therein. Up to this time over twelve thousand pages of these old, and many of them, from age and mold, nearly illegible, documents have been examined, and some sixty-five hundred names placed upon the index, with at least thirty thousand references. Many of these papers had lain unnoticed for the last fifty years; but all are now so marked by letter and number that ready access can be gained to any paper containing a given name.

I have good reason to believe that the information thus rendered accessible will result in confirming my anticipations, viz, that many of the private land claims contained in the reports, and which appear to have been confirmed, not a few of which are actually located, are excluded from confirmation, and that the number of acres of unlocated private land claims in this State will fall far short of the amount heretofore estimated.

Quite a number of these claims, accompanied by register and receiver's certificates of confirmation, and proper proofs of legal representation, have been presented to this office for adjustment, and whenever, after a careful and searching investigation, they have been deemed valid, certificates of location were issued in accordance with the provisions of the said act, and sent to your office for authentication. A list of those issued during the fiscal year ending June 30, 1872, is contained in Statement H.

#### PROPOSED SURVEYS.

The list of proposed surveys herewith submitted (Statement D) has been carefully prepared, and it is thought that with the estimated appropriation, the field work for surveys in Louisiana can be brought to a termination. The statement includes the survey of the exterior lines of townships within the belt of marshy lands bordering upon the Gulf of Mexico. It is represented by persons living in that region that it contains many exceedingly rich and fertile *coteaux* and *chênières*, covered with growth of live oak and other evergreens, and is eminently adapted to the cultivation of sea-island cotton, and the production of semi-tropical fruits. At their request it is proposed to extend the lines of public survey over such portions as may be found suitable for settlement.

There is also a large and valuable section of country lying west of the river Mermentou, and reaching to the timbered lands of the Calcasieu, mostly prairie, interspersed with pleasant groves. This region was originally surveyed in the early part of this century, 1808 to 1820, but up to a recent period has remained unoccupied, settlers preferring the timbered valleys bordering upon streams. It is now attracting the attention of the emigrant, and is being rapidly filled by a thrifty and enterprising population. The landmarks of the early surveys having become so far obliterated that they cannot be found, it is proposed, at least, to resurvey and remark the exterior lines of townships.

The balance of the field work proposed consists mainly in correcting surveys that are ascertained to have been erroneously made, and extending lines across the dry beds of what were formerly returned as lakes.

#### PROPOSED OFFICE WORK.

In addition to the regular current work of this office, it is proposed to continue the labor of indexing the records of former boards of land commissioners, until all the important records and papers are arranged in a convenient and accessible manner, and then abstract all the information thus made available into as concise a volume as is possible to give a succinct history of each private land claim in this State.



## TIMBERED LANDS.

That portion of the State drained by the waters of the Calcasieu and Sabine rivers, above the line of the "Great Qualquesieu prairie," although a country of thin soil and valueless for agricultural purposes, and for this reason has never been sought for by settlers, but still remains in the possession of the Government, is covered by a fine growth of excellent pine timber, and being of easy access and adjacent to an insatiable market, is attracting the attention of marauders; and that country so well stored with material for mechanical wealth is being seriously despoiled and trespassed upon. In view of these facts it would seem to be the true policy of the Government to restore these lands to market for private entry, or to make donation of them to some charitable, educational, or other public enterprise.

I have the honor to be, very respectfully, your obedient servant,

E. W. FOSTER,  
*Surveyor General, Louisiana.*

Hon. WILLIS DRUMMOND,  
*Commissioner of the General Land Office, Washington D. C.*



A.—Statement of surveying contracts entered into by the surveyor general of Louisiana on account of the appropriation for the fiscal year of 1870-'71.

Contracts.		Name of deputy.	Locality of work.	Estimated liability.	Lines surveyed.		Rate per mile.	Actual cost.	Remarks.
No.	Date.				Township.	Section and meander.			
5	Dec. 1, 1870	Maurice Hauké.....	Ts. 8 and 9 S., R. 1 W., and T. 10 S., Rs. 2 and 3 W., southeastern district.	\$2,000 00	<i>Mls. chs. lks</i> { 15 13 50 { ..... 62 43 27	<i>Mls. chs. lks.</i> ----- 62 43 27	\$8 8	\$121 35 500 33	} T. 9 S., R. 1 W., completed, approved; plats and transcripts transmitted; balance reported finished, but field notes not returned. Surveyor dead. Completed, approved; plats and transcripts transmitted. The city of New Orleans is liable for \$865.42 additional.
6	June 7, 1871	Ross and Sulakowski.	Ts. 12 and 13 S., R. 11 E., (New Orleans township,) southeastern district.	8,000 00	{ 14 2 16 { ..... 239 36 70	----- 239 36 70	35 35	{ 8,006 58	
Totals .....					29 15 66	301 79 97	----	8,628 26	
Amount of appropriation, (act of Congress, July 15, 1870) .....					\$10,000.			1,371 74	
Balance .....								10,000 00	
Total.....									

SURVEYOR GENERAL'S OFFICE, NEW ORLEANS, LOUISIANA, September 17, 1872

E. W. FOSTER, *Surveyor General.*



B.—Statement of surveying contracts entered into by the surveyor general of Louisiana on account of appropriation for the fiscal year ending June 30, 1872.

Contracts.		Name of deputy.	Locality of work.	Estimated liability.	Lines surveyed.		Rate per mile.	Actual cost.	Remarks.
No.	Date.				Township.	Section and meander.			
					Mls. chs. lks.	Mls. chs. lks.			
1	June 6, 1871	W. H. R. Hangen...	Ts. 14 and 15 S., Rs. 15 and 16 E.....						Contract expired by limitation.
3	July 17, 1871	John P. Parsons.....	Beds of former shallow lakes in Ts. 18, 19, and 20 N., R. 14 W., and Ts. 20 and 21 N., R. 15 W., northwestern district.	\$1,600 00	{ 42 43 08	.....	\$8 8	\$340 31 1,395 90	{ Survey completed and approved. Plats and transcripts transmitted.
4	Aug. 8, 1871	Addison G. Foster...							
5	Aug. 8, 1871	William D. Duke....	Public lines through the rejected portions of Paul Toupe's claim in Ts. 13 and 14 S., R. 20 E., southeastern district.	120 00	{ 2 04 17	.....	8 8	16 42 53 95	{ Survey completed and approved, but subsequently cancelled. See Commissioner's letter dated 23d July, 1872.
7	Aug. 24, 1871	Robert Boyd .....							
8	Sept. 26, 1871	William J. Henry...	Ts. 18, 19, 20, 21, and 22 S., R. 23 E., T. 18 S., R. 22 E., Ts. 19, 20, and 22 S., R. 24 E., and T. 20 S., R. 25 E., in the southeastern district.	3,000 00	{ 60 78 58	.....	10 8	609 06 2,313 25	{ Partially completed. Surveyor in the field.
9	Dec. 5, 1871	William H. Robinson							
10	Feb. 6, 1872	John P. Parsons.....	T. 10 S., Rs. 11 and 12 W., and T. 9 S., R. 11 W., southwestern district.	1,700 00	{ 47 13 95	.....	10 8	471 76 1,148 28	{ Canceled. See contract No. 14. Completed, approved; plats and transcripts transmitted.
12	Apr. 20, 1872	Valery Sulakowski..							
13	May 15, 1872	Samuel P. Henry....	T. 14 S., Rs. 7 and 8 W., southwestern district...	600 00					Survey completed. Returns being examined.
14	June 29, 1872	William J. McCulloh	Ts. 6 and 7 S., R. 5 E., southwestern district.....	2,000 00					Surveyor in the field.
Totals .....					164 26 11	.673 08 32		6,939 15	
Amount of appropriation, (Act of Congress, March 3, 1871) .....					\$12,240.				
Balance .....								5,300 85	
Total .....								12,240 00	

SURVEYOR GENERAL'S OFFICE, NEW ORLEANS, LOUISIANA, September 17, 1872.

E. W. FOSTER, Surveyor General, Louisiana.



C.—Statement of surveying contracts entered into by the surveyor general of Louisiana on account of special deposits for the fiscal year ending June 30, 1872.

Contract.		Name of deputy.	Locality of work.	Special de-posit.	Name of depositor.	Cost of sur-vey.	Cost of office work.	Amount re-funded.	Remarks.
No.	Date.								
2	June 26, 1871	B. B. Bristol.....	Wilson's Point, in T. 20 N., R. 16 W., north-western district.	\$100 00	Thomas Pitt.....	\$40 85	\$25 00	\$34 15	Approved, and plats and transcripts transmitted.
6	Aug. 19, 1871	Valery Sulakowski..	Sec. 9, T. 13 S., R. 12 E., southeastern district....	70 00	William Smith.....	50 00	20 00	.....	Do.
11	Feb. 23, 1872	John P. Parsons ....	Sec. 45, T. 3 S., R. 9 E., Greensburgh district.....	100 00	M. V. B. Hughes and A. J. Holton.	85 00	15 00	.....	Do.

E. W. FOSTER, Surveyor General, Louisiana.

SURVEYOR GENERAL'S OFFICE, NEW ORLEANS, LOUISIANA, September 17, 1872.

D.—Proposed surveys in the State of Louisiana for the fiscal year ending June 30, 1874, with the estimated cost thereof at the rate of ten dollars per mile for township boundaries, and at eight dollars per mile for other lines.

District.	Location.	Number of miles.	Estimated cost.	Remarks.
Southeastern .....	T. 10 S., R. 14 E.; T. 11 S., R. 14 E.; T. 12 S., R. 14 E.....	500	\$4,000 00	Necessary to settle conflicts and to connect with resurveys of surrounding townships.
	T. 14 S., R. 25 E.....	31	250 00	To correct errors and to locate private claims.
	T. 18 S., R. 16 E.; T. 18 S., R. 18 E.; T. 18 S., R. 20 E.; T. 18 S., R. 21 E.; T. 19 S., R. 16 E.; T. 19 S., R. 17 E.; T. 19 S., Rs. 19 to 28 E., inclusive; T. 20 S., Rs. 19 to 28 E., inclusive; T. 21 S., Rs. 15 to 30 E., inclusive.	650	5,250 00	Explained in report of H. C. de Hana, dated February 1, 1867.
Southwestern .....	T. 3 N., R. 4 E.; T. 3 N., R. 5 E.....	95	800 00	Misclosures in the original survey.
	T. 9 S., R. 13 W.; T. 10 S., R. 13 W.....	100	800 00	Extension of lines of public survey through a large island in the Sabine River.
	T. 9 S., R. 3 E.; T. 9 S., R. 4 E.....	180	1,500 00	{ Discrepancies and errors in the original survey disclosed by the resurvey of adjoining townships.
	T. 10 S., R. 2 E.; T. 11 S., R. 2 E.; T. 12 S., R. 2 E.....	240	2,000 00	
	T. 11 S., R. 6 E.; T. 12 S., R. 6 E.....	50	400 00	Survey of former bed of Lake Tassce.
	The survey of that portion of the southwestern district as represented by dotted lines on the accompanying map of the State of Louisiana as far as practicable.	775	6,600 00	Reported to this office as containing high lands partly inhabited and cultivated.
North of Red River..	T. 10 N., R. 5 E.; T. 9 N., R. 6 E.....	240	2,000 00	Misclosures and location of private claims.
Northwestern.....	Extending lines of public survey through Lakes Terre-Noire, Casvisnia, Bayou Pierre, and other shallow lakes.	300	2,500 00	The former beds of lakes have become dry.
Total amount to be appropriated for the fiscal year ending June 30, 1874.....			26,100 00	

E. W. FOSTER, Surveyor General, Louisiana.

SURVEYOR GENERAL'S OFFICE, NEW ORLEANS, LOUISIANA, September 17, 1872.



E.—*Estimate of funds to be appropriated for the fiscal year ending June 30, 1874, for surveying in Louisiana, for compensation of the surveyor general, and the clerks in his office, and for contingent expenses of the surveyor general's office.*

Proposed surveys :

Southeastern district, west of Mississippi River.....	\$8,700
Southeastern district, east of Mississippi River.....	800
District north of Red River.....	2,000
Northwestern district.....	2,500
Southwestern district.....	\$7,100
Southwestern district, unsurveyed townships .....	5,000
	<hr/> 12,100

Salaries :

Salary of surveyor general.....	2,000
Salary of chief clerk.....	1,800
Salary of one draughtsman.....	1,500
Salary of four other clerks.....	4,800
	<hr/> 10,100

Contingent expenses :

Stationery, furniture, postage, book-binding, freight, servant-hire, &c.....	2,500
------------------------------------------------------------------------------	-------

Total amount of appropriation required for the fiscal year ending June 30, 1874. 38,700

SURVEYOR GENERAL'S OFFICE, DISTRICT OF LOUISIANA,  
New Orleans, September 17, 1872.

E. W. FOSTER,  
Surveyor General, Louisiana.



F.—Statement of account of appropriation for incidental expenses of the office of the surveyor general of Louisiana for the fiscal year ending June 30, 1872.

1871. September 30	To amount paid during the third quarter of 1871, as per vouchers and accounts rendered.	\$918 40	1871. July 1	By appropriation by act of Congress approved March 3, 1871, for incidental expenses of this office.	\$2,500 00
December 31	To amount paid during the fourth quarter of 1871, as per vouchers and accounts rendered.	934 85			
1872. March 31	To amount paid during the first quarter of 1872, as per vouchers and accounts rendered.	419 80			
June 30	To amount paid during the second quarter of 1872, as per vouchers and accounts rendered.	226 95			
	Total.....	2,500 00		Total.....	2,500 00

SURVEYOR GENERAL'S OFFICE,  
New Orleans, Louisiana, September 17, 1872.

E. W. FOSTER,  
Surveyor General, Louisiana.

G.—Account of appropriation for salary of surveyor general of Louisiana, and for compensation of clerks and draughtsmen in his office, for the fiscal year ending June 30, 1872.

1871. September 30	To account of E. W. Foster for one quarter's salary.....	\$500 00	1871. July 1	By appropriation by act of Congress approved March 3, 1871, for salary of surveyor general of Louisiana and for compensation of clerks and draughtsmen.	\$2,000 00 2,500 00
	To amount paid clerks and draughtsmen for quarter's salary, as per accounts rendered.	625 00			
December 31	To account of E. W. Foster for one quarter's salary.....	500 00			
	To amount paid clerks and draughtsmen for quarter's salary, as per accounts rendered.	1,225 00	1872. May 18	By appropriation by act of Congress approved May 18, 1872, for payment of clerks in the office of surveyor general of Louisiana.	1,500 00
1872. March 31	To account of E. W. Foster for one quarter's salary.....	500 00			
	To amount paid clerks and draughtsmen for quarter's salary, as per accounts rendered.	625 00			
June 30	To account of E. W. Foster for one quarter's salary.....	500 00			
	To amount paid clerks and draughtsmen for quarter's salary, as per accounts rendered.	1,525 00			
	Total.....	6,000 00		Total.....	6,000 00

SURVEYOR GENERAL'S OFFICE,  
New Orleans, Louisiana, September 17, 1872.

E. W. FOSTER,  
Surveyor General, Louisiana.



H.—Abstract of certificates of location issued by Everett W. Foster, surveyor general of Louisiana, in satisfaction of certain confirmed unlocated private land claims, under the provisions of the 3d section of the act of Congress approved June 2, 1858, for the year ending June 30, 1872.

Date.	DESIGNA- TION.		Name of confirmer.	REPORT.						Date of confirma- tory act.	Confirmed area.	Surveyed area.	Deficiency.	QUANTITY IN ACRES.			
				By whom.	Date.	Class and number.	State Pa- pers, D. Green.		Number in 80 acres.					Frae- tional.		Total.	
	No.	Letters.					Vol.	Page.						No.	Aeres		
1871.																	
Oct. 13	47	A to I	Francisco Adante...	D. J. Sutton.....	Jan. 1, 1821	First class ... 31	3	525	Feb. 28, 1823	1, 015. 00	253. 75	761. 25	8	1	121. 25	761. 25	
Nov. 17	48	A to H	Thomas Chote .....	Old Board .....		B ..... 1973	2	731	.....	640. 00	.....	640. 00	8	.....	.....	640. 00	
18	49	A to H	Martin Commissae..	.....do .....		B ..... 1441	2	706	.....	640. 00	.....	640. 00	8	.....	.....	640. 00	
1872.																	
March 5	50	A to Y	Williams C. Ellis....	Attakapas report ...	May 1, 1815	55	3	108	Apr. 29, 1816	2, 041. 68	.....	2, 041. 68	24	1	121. 68	2, 041. 68	
5	51	A to Y	John Ellis.....	.....do .....	May 1, 1815	54	3	108	Apr. 29, 1816	2, 041. 68	.....	2, 041. 68	24	1	121. 68	2, 041. 68	
5	52	A to Y	Richard Ellis.....	.....do .....	May 1, 1815	53	3	108	Apr. 29, 1816	2, 041. 68	.....	2, 041. 68	24	1	121. 68	2, 041. 68	
24	53	A to P	Heirs of William Conway.	J. O. Cosby.....	June 7, 1813	A ..... 48	3	36	Mar. 3, 1819	1, 283. 00	.....	1, 283. 00	15	1	83. 00	1, 283. 00	
24	54	A to P	Heirs of William Conway.	.....do .....	June 7, 1813	A ..... 49	3	36	Mar. 3, 1819	1, 283. 00	.....	1, 283. 00	15	1	83. 00	1, 283. 00	
24	55	A to P	Heirs of William Conway.	.....do .....	June 7, 1813	A ..... 50	3	36	Mar. 3, 1819	1, 283. 00	.....	1, 283. 00	15	1	83. 00	1, 283. 00	
Feb. 1	56	A to C	Philip Green.....	R. R. West. Dist. La.	Dec. 30, 1815	B ..... 1274	3	216	Feb. 5, 1825	640. 00	391. 62	248. 38	2	1	88. 38	248. 38	
23	57	A to P	Heirs of William Conway.	J. O. Cosby.....	June 7, 1813	B ..... 15	3	45	Mar. 3, 1819	1, 280. 00	.....	1, 280. 00	16	.....	.....	1, 280. 00	
29	58	A to E	Henry Flower.....	Cosby & Skipwith...	Nov. 18, 1820	B ..... 46	3	414	May 8, 1822	( * )	.....	412. 48	4	1	92. 48	412. 48	
March 12	59	A to H	Joseph Vidal.....	.....do .....	Nov. 18, 1820	A ..... 5	3	412	May 8, 1822	680. 56	.....	680. 56	7	1	120. 56	680. 56	
12	60	A to H	Joseph Vidal.....	.....do .....	Nov. 18, 1820	A ..... 6	3	412	May 8, 1822	680. 56	.....	680. 56	7	1	120. 56	680. 56	
12	61	A to H	Joseph Johnson....	.....do .....	July 24, 1821	274	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	62	A to H	Thomas Dawson ....	Cosby, actual settlers	June 7, 1813	11	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	63	A to H	James Heath.....	Cosby & Skipwith...	July 24, 1821	Actual settlers. 300	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	64	A to H	E. Boatner.....	.....do .....	July 24, 1821	183	3	447	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	65	A to H	Robert Cook .....	Cosby .....	June 7, 1813	78	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	66	A to H	Henry Clark .....	Cosby & Skipwith...	July 24, 1821	327	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	67	A to H	Thomas C. Hunt ....	.....do .....	Dec. 24, 1819	343	3	389	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	68	A to H	Bellington Taylor...	J. O. Cosby.....	June 7, 1813	123	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
12	69	A to H	Isaac Bush.....	.....do .....	June 7, 1813	308	3	64	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
April 27	70	A to H	Thomas Egan .....	.....do .....	June 7, 1813	Actual settlers. 310	3	64	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	71	A to H	John Lee .....	.....do .....	June 7, 1813	320	3	65	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	72	A to H	Robert Davis.....	.....do .....	June 7, 1813	18	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	73	A to H	Thomas Blane, sen..	.....do .....	June 7, 1813	46	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	74	A to H	Jacob Esely.....	.....do .....	June 7, 1813	47	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	75	A to H	Jarrett McCorry....	.....do .....	June 7, 1813	55	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	
27	76	A to H	Reuben Pondere .....	.....do .....	June 7, 1813	66	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00	



27	77	A to H	William Bruce	do	June 7, 1813	do	90	3	63	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	78	A to H	John Webb	do	June 7, 1813	do	155	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	79	A to H	Joshua Lewis	do	June 7, 1813	do	157	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	80	A to H	William Harris	do	June 7, 1813	do	167	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	81	A to H	William Liles	do	June 7, 1813	do	219	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	82	A to H	Thomas Plane, jr.	do	June 7, 1813	do	229	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	83	A to H	Alexander Callendar	do	June 7, 1813	do	285	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	84	A to H	William Bailey	do	June 7, 1813	do	292	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	85	A to H	James Crawford	do	June 7, 1813	do	312	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	86	A to H	Charles Bruce	do	June 7, 1813	do	313	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	87	A to H	Robert Singleton	do	June 7, 1813	do	321	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	88	A to H	Samuel Nicholson	do	June 7, 1813	do	324	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	89	A to H	John Callihann	J. O. Cosby, sup'l	June 7, 1813	do	110	3	71	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	90	A to H	William Connell	do	June 7, 1813	do	115	3	71	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	91	A to H	William Drake	do	June 7, 1813	do	119	3	71	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	92	A to H	William Cabin	Cosby & Skipwith	Dec. 24, 1819	do	174	3	387	May 8, 1822	640. 00	640. 00	8	640. 00
27	93	A to H	Abram Craker	do	Dec. 24, 1819	do	344	3	389	May 8, 1822	640. 00	640. 00	8	640. 00
27	94	A to H	Richard Barritt	do	July 24, 1821	do	41	3	446	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	95	A to H	Stephen Chenault	do	July 24, 1821	do	320	3	448	Aug. 6, 1846	640. 00	640. 00	8	640. 00
30	96	A to H	John McHolden	J. O. Cosby	June 7, 1813	do	74	3	63	Mar. 3, 1819	640. 00	640. 00	8	640. 00
30	97	A to H	Meredith Hobbs	do	June 7, 1813	do	283	3	64	Mar. 3, 1819	640. 00	640. 00	8	640. 00
30	98	A to H	William B. Littleton	J. O. Cosby, sup'l	June 7, 1813	do	1	3	69	Mar. 3, 1819	640. 00	640. 00	8	640. 00
30	99	A to H	Joseph White	do	June 7, 1813	do	3	3	69	Mar. 3, 1819	640. 00	640. 00	8	640. 00
30	100	A to H	D. Wooten	do	June 7, 1813	do	168	3	71	Mar. 3, 1819	640. 00	640. 00	8	640. 00
30	101	A to H	Ransom M. Collin	Cosby & Skipwith	Dec. 24, 1819	do	71	3	385	May 8, 1822	640. 00	640. 00	8	640. 00
30	102	A to H	Charles Dogen	do	Dec. 24, 1819	do	117	3	386	May 8, 1822	640. 00	640. 00	8	640. 00
30	103	A to H	Instant Hall	do	Dec. 24, 1819	do	236	3	387	May 8, 1822	640. 00	640. 00	8	640. 00
30	104	A to H	Jeremiah Smith	do	Dec. 24, 1819	do	323	3	388	May 8, 1822	640. 00	640. 00	8	640. 00
30	105	A to H	John Fernese	do	Dec. 24, 1819	do	338	3	388	May 8, 1822	640. 00	640. 00	8	640. 00
May	11	106	A to H	Brazil Bing	do	Nov. 18, 1820	30	3	417	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	107	A to H	Justin Andrews	do	Nov. 18, 1820	do	31	3	417	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	108	A to H	A. Hats	do	Nov. 18, 1820	do	101	3	418	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	109	A to H	H. Bankston	do	July 24, 1821	do	37	3	446	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	110	A to H	C. Nelson	do	July 24, 1821	Actual settlers.	47	3	446	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	111	A to H	Henry Beard	do	July 24, 1821	do	67	3	447	Aug. 6, 1846	640. 00	640. 00	8	640. 00
11	112	A to H	C. Burney	do	July 24, 1821	do	171	3	447	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	113	A to H	Samuel Robb	do	July 24, 1821	do	114	3	447	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	114	A to H	Peter Galloway	James O. Cosby	June 7, 1813	do	764	3	67	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	115	A to H	Hugh R. Blunt	do	June 7, 1813	do	330	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	116	A to H	William Dixon	do	June 7, 1813	do	341	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	117	A to H	Fortescue Cumming	do	June 7, 1813	do	633	3	67	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	118	A to H	Fortescue Cumming	do	June 7, 1813	do	634	3	67	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	119	A to H	John Jacob Repsher	do	June 7, 1813	do	435	3	65	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	120	A to H	Gamelin Peas	do	June 7, 1813	do	75	3	70	Mar. 3, 1819	640. 00	640. 00	8	640. 00
27	121	A to H	Pleasant Glass	Cosby & Skipwith	Dec. 24, 1819	do	78	3	385	May 8, 1822	640. 00	640. 00	8	640. 00
27	122	A to H	Sarah Erwen	do	Dec. 24, 1819	do	108	3	386	May 8, 1822	640. 00	640. 00	8	640. 00
27	123	A to H	Ann Scott	do	July 24, 1821	do	15	3	446	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	124	A to H	Samuel Smart	do	July 24, 1821	do	281	3	448	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	125	A to H	Moody Hottoman	do	July 24, 1821	do	163	3	447	Aug. 6, 1846	640. 00	640. 00	8	640. 00
27	126	A to H	G. Kerr	do	July 24, 1821	do	182	3	447	Aug. 6, 1846	640. 00	640. 00	8	640. 00

\* 3,420 arpents.



H.—Abstract of certificates of location issued by Everett W. Foster, surveyor general of Louisiana, &c.—Continued.

80

REPORT OF THE COMMISSIONER OF

Date.	DESIGNA- TION.		Name of confirnee.	REPORT.					Date of confirma- tory act.	Confirmed area.	Surveyed area.	Deficiency.	QUANTITY IN ACRES.			
				By whom.	Date.	Class and number.	State Pa- pers, D. Green.						Number in 80 acres.	Frac- tional.		Total.
	No.	Letters.					Vol	Page.						No.	Acres	
1872.																
May 27	127	A to H	William Sullivan....	Cosby & Skipwith...	July 24, 1821	Actual settlers, 51	3	447	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
June 11	128	A to H	Thomas Galloway...	do	Dec. 24, 1819	do..... 239	3	387	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
11	129	A to H	Gamelin Peas.....	Cosby, sup'l.....	June 7, 1813	76	3	70	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	130	A to H	Henry Roache.....	Cosby.....	June 7, 1813	Actual settlers, 339	3	65	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	131	A to H	John Waltman.....	do	June 7, 1813	343	3	65	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	132	A to H	Evan Shelby.....	Cosby, sup'l.....	June 7, 1813	86	3	70	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	133	A to H	S. Hatch.....	do	June 7, 1813	146	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	134	A to H	Robert Tikell.....	do	June 7, 1813	Actual settlers, 176	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
11	135	A to H	James Rogers.....	Cosby & Skipwith...	Dec. 24, 1819	105	3	386	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
11	136	A to H	Isaac Chambers.....	do	Dec. 24, 1819	177	3	387	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
11	137	A to H	John Christmas.....	do	Dec. 24, 1819	211	3	387	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
11	138	A to H	F. Milon.....	do	Dec. 24, 1819	318	3	388	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
11	139	A to H	T. Pitts.....	do	Nov. 18, 1820	181	3	419	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	140	A to H	Constance Ternoire..	do	July 24, 1821	49	3	446	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	141	A to H	Francis Claireau.....	do	July 24, 1821	79	3	447	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	142	A to H	R. S. Rawlings*.....	do	July 24, 1821	147	3	447	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	143	A to H	John Rembert.....	do	July 24, 1821	212	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	144	A to H	Catherine Shaw.....	do	July 24, 1821	269	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	145	A to H	John Horton.....	do	July 24, 1821	290	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	146	A to H	Christopher Gale.....	do	July 24, 1821	389	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	147	A to H	Jacob Row.....	do	July 24, 1821	22	3	446	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
11	148	A to H	do	do	July 24, 1821	390	3	448	Aug. 6, 1846	640. 00	.....	640. 00	8	.....	.....	640. 00
29	149	A to H	John Howard.....	J. O. Cosby.....	June 7, 1813	Actual settlers, 28	3	63	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	150	A to H	James Jeter.....	do	June 7, 1813	do..... 273	3	64	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	151	A to H	Aaron and John West	do	June 7, 1813	do..... 360	3	65	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	152	A to H	James Norton.....	do	June 7, 1813	do..... 447	3	65	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	153	A to H	James Goyne.....	do	June 7, 1813	do..... 639	3	67	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	154	A to H	Ezekiel West.....	do	June 7, 1813	do..... 652	3	67	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	155	A to H	Absalom Wells.....	do	June 7, 1813	do..... 665	3	67	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	156	A to H	Cady Raby, sr.....	do	June 7, 1813	do..... 681	3	67	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	157	A to H	David McElroy.....	Cosby, sup'l.....	June 7, 1813	do..... 120	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	158	A to H	Jesse West.....	do	June 7, 1813	do..... 125	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	159	A to H	Uriah McGran.....	do	June 7, 1813	do..... 142	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	160	A to H	Daniel McNeal.....	do	June 7, 1813	do..... 160	3	71	Mar. 3, 1819	640. 00	.....	640. 00	8	.....	.....	640. 00
29	161	A to H	Joseph Blanchard...	Cosby & Skipwith...	Dec. 24, 1819	do..... 4	3	385	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
29	162	A to H	Jonathan Carrington.	do	Dec. 24, 1819	do..... 6	3	385	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00
29	163	A to H	Martin Watkins.....	do	Dec. 24, 1819	do..... 13	3	385	May 8, 1822	640. 00	.....	640. 00	8	.....	.....	640. 00



29	164	A to H	Rice Mills.....	do	Dec. 24, 1819	do	8	3	385	May 8, 1822	640.00	640.00	8	640.00
29	165	A to H	Francis O. Riley.....	do	Dec. 24, 1819	do	63	3	385	May 8, 1822	640.00	640.00	8	640.00
29	166	A to H	William Allen.....	do	Dec. 24, 1819	do	113	3	386	May 8, 1822	640.00	640.00	8	640.00
29	167	A to H	David McCulloch.....	do	Dec. 24, 1819	do	139	3	386	May 8, 1822	640.00	640.00	8	640.00
29	168	A to H	Richard H. Kirkland.....	do	Dec. 24, 1819	do	159	3	386	May 8, 1822	640.00	640.00	8	640.00
29	169	A to H	E. Ross.....	J. O. Cosby	Dec. 24, 1819	do	221	3	387	May 8, 1822	640.00	640.00	8	640.00
29	170	A to H	W. F. Nicholson.....	Cosby & Skipwith	Dec. 24, 1819	do	234	3	387	May 8, 1822	640.00	640.00	8	640.00
29	171	A to H	James Nicholson.....	do	Dec. 24, 1819	do	235	3	387	May 8, 1822	640.00	640.00	8	640.00
29	172	A to H	William Howard.....	do	Dec. 24, 1819	do	237	3	387	May 8, 1822	640.00	640.00	8	640.00
29	173	A to H	Hezekiah Harrill.....	do	Dec. 24, 1819	do	304	3	388	May 8, 1822	640.00	640.00	8	640.00
29	174	A to H	Thomas Galloway.....	do	Dec. 24, 1819	do	317	3	388	Aug. 6, 1846	640.00	640.00	8	640.00
29	175	A to H	William W. Johnson.....	do	Dec. 24, 1819	do	345	3	389	Aug. 6, 1846	640.00	640.00	8	640.00
29	176	A to H	Duffy D. Ray.....	do	Nov. 18, 1820	do	4	3	417	Aug. 6, 1846	640.00	640.00	8	640.00
29	177	A to H	Alexander McClenen.....	do	Nov. 18, 1820	do	22	3	417	Aug. 6, 1846	640.00	640.00	8	640.00
29	178	A to H	E. Dalton.....	do	Nov. 18, 1820	do	35	3	417	Aug. 6, 1846	640.00	640.00	8	640.00
29	179	A to H	W. Johnson.....	do	Nov. 18, 1820	do	114	3	418	Aug. 6, 1846	640.00	640.00	8	640.00
29	180	A to H	A. Hernandez.....	do	Nov. 18, 1820	do	152	3	418	Aug. 6, 1846	640.00	640.00	8	640.00
29	181	A to H	William Allen.....	do	July 24, 1821	do	23	3	446	Aug. 6, 1846	640.00	640.00	8	640.00
29	182	A to H	Benjamin Thomas.....	do	July 24, 1821	do	65	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	183	A to H	George Rudd.....	do	July 24, 1821	do	74	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	184	A to H	Joseph White.....	do	July 24, 1821	do	81	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	185	A to H	Daniel Allen.....	do	July 24, 1821	Actual settlers,	87	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	186	A to H	De Lafayette Kezz.....	do	July 24, 1821	do	142	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	187	A to H	David Wilson.....	do	July 24, 1821	do	151	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	188	A to H	George Smith.....	do	July 24, 1821	do	170	3	447	Aug. 6, 1846	640.00	640.00	8	640.00
29	189	A to H	Winfry and <i>al.</i> .....	do	July 24, 1821	do	264	3	448	Aug. 6, 1846	640.00	640.00	8	640.00
29	190	A to H	Thomas McCling.....	do	July 24, 1821	do	272	3	448	Aug. 6, 1846	640.00	640.00	8	640.00
29	191	A to H	Hugh Blunt.....	do	July 24, 1821	do	299	3	448	Aug. 6, 1846	640.00	640.00	8	640.00
29	192	A to H	F. and M. Daigle.....	do	July 24, 1821	do	331	3	448	Aug. 6, 1846	640.00	640.00	8	640.00
29	193	A to H	John D. Wilds.....	J. O. Cosby	June 7, 1813	do	631	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	194	A to H	Uriel King.....	do	June 7, 1813	do	683	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	195	A to H	John Wax.....	do	June 7, 1813	do	689	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	196	A to H	William Wilson.....	do	June 7, 1813	do	754	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	197	A to H	Jesse McClendon.....	do	June 7, 1813	do	773	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	198	A to H	Shadrick McClendon.....	do	June 7, 1813	do	774	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	199	A to H	James Cotton.....	do	June 7, 1813	do	873	3	68	Mar. 3, 1819	640.00	640.00	8	640.00
29	200	A to H	Stephen Richardson.....	do	June 7, 1813	do	880	3	68	Mar. 3, 1819	640.00	640.00	8	640.00
29	201	A to H	Wm. Crier.....	J. O. Cosby, sup'l	June 7, 1813	do	39	3	70	Mar. 3, 1819	640.00	640.00	8	640.00
29	202	A to H	Thomas H. Weeks.....	do	June 7, 1813	do	123	3	71	Mar. 3, 1819	640.00	640.00	8	640.00
29	203	A to H	James Burrell.....	Cosby & Skipwith	Dec. 24, 1819	do	58	3	385	May 8, 1822	640.00	640.00	8	640.00
29	204	A to H	F. Canin.....	do	Nov. 18, 1820	do	138	3	418	May 8, 1822	640.00	640.00	8	640.00
29	205	A to H	John Chambers.....	Rannels & Rinchen	Jan. 29, 1825	do	111	4	315	May 4, 1826	640.00	640.00	8	640.00
29	206	A to H	G. B. Demuran.....	do	Jan. 29, 1825	Actual settlers,	116	4	315	May 4, 1826	640.00	640.00	8	640.00
29	207	A to H	John Young.....	J. O. Cosby	June 7, 1813	do	8	3	63	Mar. 3, 1819	640.00	640.00	8	640.00
29	208	A to H	William Bell.....	do	June 7, 1813	do	408	3	65	Mar. 3, 1819	640.00	640.00	8	640.00
29	209	A to H	Stephen Stenson.....	do	June 7, 1813	do	485	3	66	Mar. 3, 1819	640.00	640.00	8	640.00
29	210	A to H	Joseph A. Leech.....	do	June 7, 1813	Actual settlers,	514	3	66	Mar. 3, 1819	640.00	640.00	8	640.00
29	211	A to H	Davis Ellison.....	do	June 7, 1813	do	596	3	66	Mar. 3, 1819	640.00	640.00	8	640.00
29	212	A to H	Alex. Freeland.....	do	June 7, 1813	do	674	3	67	Mar. 3, 1819	640.00	640.00	8	640.00
29	213	A to H	William McRay.....	do	June 7, 1813	do	685	3	67	Mar. 3, 1819	640.00	640.00	8	640.00

\* This scrip was returned for correction of name; redrawn under name of K. S. Rawlins.



H.—Abstract of certificates of location issued by Everett W. Foster, surveyor general of Louisiana, &c.—Continued.

Date.	DESIGNA- TION.		Name of confirmer.	REPORT.						Date of confirma- tory act.	Confirmed area.	Surveyed area.	Deficiency.	QUANTITY IN ACRES.			
				By whom.	Date.	Class and number.	State Pa- pers, D. Green.		Number in 80 acres.					Frac- tional.		Total.	
	No.	Letters					Vol.	Page.						No.	Acres		
1872.																	
June 29	214	A to H	Lewis H. Guerlain ..	Cosby, sup'l.....	June 7, 1813	Actual settlers, 13	3	69	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	215	A to H	William Rowan.....	do .....	June 7, 1813	do..... 43	3	70	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	216	A to H	John Sprenkle .....	do .....	June 7, 1813	do..... 47	3	70	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	217	A to H	Jacob Jarrel .....	do .....	June 7, 1813	do..... 56	3	70	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	218	A to H	John S. Drigans .....	do .....	June 7, 1813	do..... 132	3	71	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	219	A to H	Isaac Johnson, jr.....	do .....	June 7, 1813	do..... 189	3	72	Mar. 3, 1819	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	220	A to H	Juan L. Piloe .....	Cosby & Skipwith...	Dec. 24, 1819	do..... 5	3	385	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	221	A to H	Jesse Kesspy .....	do .....	Dec. 24, 1819	do..... 82	3	385	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	222	A to H	Thomas Young .....	do .....	Dec. 24, 1819	do..... 241	3	387	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	223	A to H	Thomas Hunt.....	do .....	Dec. 24, 1819	do..... 253	3	387	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	224	A to H	Eli Bolling.....	do .....	Dec. 24, 1819	do..... 256	3	388	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	225	A to H	Stephen Stinson.....	do .....	Dec. 24, 1819	do..... 339	3	388	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	226	A to H	James Smith.....	do .....	Dec. 24, 1819	do..... 360	3	389	May 8, 1822	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	227	A to H	B. V. Lisle .....	do .....	July 24, 1821	do..... 36	3	417	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	228	A to H	Benjamin Cassels .....	do .....	July 24, 1821	do..... 40	3	446	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	229	A to H	Robert Ratliff.....	do .....	July 24, 1821	do..... 48	3	446	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	230	A to H	William Burham.....	do .....	July 24, 1821	do..... 132	3	447	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	231	A to H	J. Fletcher .....	do .....	July 24, 1821	do..... 261	3	448	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	232	A to H	Richard Ege .....	do .....	July 24, 1821	do..... 298	3	448	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00
29	233	A to H	Antoine Bessy .....	do .....	July 24, 1821	do..... 338	3	448	Aug. 6, 1846	640. 00	.....	640. 00	∞	.....	.....	.....	640. 00

SURVEYOR GENERAL'S OFFICE,  
New Orleans, La., September 17, 1872,

E. W. FOSTER,  
Surveyor General, Louisiana.



## I.—List of persons employed in the office of the surveyor general of Louisiana July 1, 1872.

Name.	Birthplace.	Where appointed.	Whence appointed.	Position.	Salary.
Everett W. Foster.....	Massachusetts.	Louisiana.....	Arkansas.....	Surveyor general..	\$2,000
Henry Gascon.....	France.....	do.....	Louisiana.....	Chief clerk.....	1,800
Aimé Bercegeay.....	Belgium.....	do.....	do.....	Draughtsman.....	1,200
Wm. H. Robinson.....	Massachusetts.	do.....	do.....	Clerk.....	1,200
Arthur Gascon.....	Louisiana.....	do.....	do.....	Copyist.....	1,000
Joseph Brown.....	do.....	do.....	do.....	Messenger.....	400
Dennis Gibson.....	do.....	do.....	do.....	Porter.....	300

E. W. FOSTER,  
Surveyor General, Louisiana.

SURVEYOR GENERAL'S OFFICE,  
New Orleans, Louisiana, September 17, 1872.

## B.—Report of the surveyor general of Florida.

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, September 25, 1872.

SIR: In compliance with your instructions of April 5, I have the honor to submit for your consideration the following report of surveying operations in this district during the fiscal year ending June 30, 1872, together with tabular statements of office and field work.

## SURVEYS.

All the field work undertaken during the present year has been completed and the work reported to this office, excepting the special contract of Deputy Maedonald.

Contract No. 8, made with Deputy Samuel Hamblen, was the first contract for the year. The deputy took the field about the middle of December, and returned his work to this office the 16th day of May following. As his work north of the Caloosahatchie River exceeded the estimate for the whole, no work was done by him south of the river. The office work was completed and the duplicate plats and transcribed field notes, with account of deputy, forwarded to the General Land Office on the 22d day of July.

I contracted with Deputy William Lee Apthorp on the 23d day of December for the survey of a standard meridian line, from the Caloosahatchie River south as far as practicable for the survey of a correction parallel between townships 46 and 47 south, running east from the meridian line to Lake Okechobee, or to the marshes of said lake, and west from said line to the Gulf of Mexico; also for the survey of township lines embraced within the above mentioned lines until he should run five hundred and sixty-three miles of township lines. Owing to some unavoidable delays the deputy did not get into the field until some time in March; the season being so far advanced he failed to make his full amount of miles before the rainy season set in, which drove him from the field. His work was reported July 1, and the diagrams and transcribed field notes, together with his account, were forwarded to the General Land Office July 31.

Contract No. 10, dated January 3, 1872, with Deputy M. A. Williams, for the survey of Key Largo and adjoining keys, was reported July 6. The office work is now being pushed forward as rapidly as possible and will soon be completed and forwarded.

Contract No. 11, with Deputy J. A. Macdonald, for a special survey, has not been returned; nothing has been heard from the deputy, so no reasons can be assigned for the delay.

The contract made with Deputy M. A. Williams for the survey of township 45 south, ranges 41, 42, and 43 east, and township 46 south, range 41 east, contract dated 24th of April, 1871, afterward extended to March 1, 1872, and again to June 1, was reported to this office June 1. The office work was delayed for some time on account of some irregularities in the notes, and as the deputy's whereabouts at this time was uncertain, no communication could be got to him. The office work is now completed, and the duplicate plats and notes will be sent forward as soon as examined and approved.

Contract No. 7, with Deputy Charles F. Smith, which was to have been executed by August 1, 1871, and which was extended to April 1, 1872, has not been executed. Under date of April 1, I received a letter from the deputy asking that the contract be canceled, as Mr. Westcott, the party interested, had failed, up to that time, to furnish the required data to enable him to locate the grant, though repeatedly solicited for such



*data.* I would therefore recommend that the contract be canceled, thereby relieving the deputy from any further responsibility in the matter.

#### CHARACTER OF COUNTRY SURVEYED.

The country north of the Caloosahatchie River, surveyed by Deputy Hamblen, is generally fine; some small hummocks on the river, in range 26, which he reported as very rich and susceptible of cultivation.

West of range 25, and between the mouth of Pease Creek and the Caloosahatchie River, the fine lands are of good quality, high, and somewhat rolling, well timbered, little or no saw palmetto, and, being below the frost line, are of very great value for raising tropical fruits; the soil is good and of considerable depth. Sea-island cotton was found growing wild in many places; the plant looked well and was heavily fruited.

South of the river the coral rocks come very near the surface, though there is a large quantity of good merchantable pine growing in this region, which is growing more valuable every year; the soil is suitable for pine-apples and small fruits. The settlers at Fort Myers raise some oranges, but to protect the trees from being blown over by heavy winds, on account of the thinness of the soil, they place heavy timbers around them, at a distance of four or five feet from the body of the tree. The orange grown here is large and juicy, and is excelled by none.

There is a considerable settlement at Fort Myers, mostly interested in stock raising. The number of cattle south of the River is estimated at seventy-five thousand (75,000) head. The prairie and saw grass bordering Lake Okechobee furnishes excellent pastures, and is good at all seasons of the year. Cattle are shipped from here to Cuba and bring a good price. The fisheries here are entirely neglected, though there is probably no point on the coast where such facilities could be obtained as here; for several months the river and bay are literally alive with schools of mullet, which could be taken by the hundred barrels, and, when properly cured, find a ready market.

On the eastern part of his contract, Deputy Apthorp found several Indian families living in small palmetto shanties. They had small patches in cultivation, in corn, beans, pumpkins, &c., though they seemed to subsist mostly on game and fish. Deer and other game were found in abundance, and the ponds and creeks were full of fish. The Indians dress their deer-skins and sell them at Forts Thompson or Myers, for whisky, tobacco, and such articles of clothing as they need. There were but few of them, not more than fifteen or twenty men, women, and children. They were peaceably disposed, and a party of four or five of them spent several days with the deputy in his camp. They still speak their native tongue, though they can understand some English. They carried an interpreter with them, whom they called the "doctor," and who seemed to be principal man among them. There are several small parties west of the everglades, some near the mouth of the Kissinnee River, and still others who live in and east of the everglades. They do not seem to have any recognized chief over them, though in each community one of their number is looked up to as the head of the party. There are probably not more than two or three hundred of them living in the State, and they occupy lands that would be untenable for white men, so it is fair to be supposed they will not be disturbed for years to come. Their wants are few and easily supplied. They have no difficulty in getting plenty to eat. They can erect a shelter, that is all they would have it, in two hours, and as for clothing in this warm climate, the less the better. They were filthy, and looked healthy, and must certainly be happy.

The lands surveyed by Deputy Williams at the south end of Lake Worth are of little value, unless drained. On the lake are several small bodies of good hummock, not large enough, however, to attract settlers to that point.

The keys surveyed by Deputy Williams have on them a considerable rocky hummock, very productive and seemingly very desirably located for raising fruits. The growing of pine-apples on Key Largo is now an established success. Mr. Baker, who cultivates them largely on this key, makes it a success financially, and the fruit is as fine as can be raised in the West Indies, and more easily got to market. The timber growing on these keys is entirely different from any found in any other part of the State, being principally crab wood, poison wood, mastic, maderia wood, wahoo, plum, and gumbo-limbo.

The reefs outside protect the keys from the heavy storms, and the hummock is generally high enough to be cultivated without fear of overflow.

Under the appropriation for continuing the surveys for the present fiscal year, the remainder of the keys, from Key Largo to Key West will be surveyed, and the subdivision of the country south of the Caloosahatchie River will be pushed forward to the full extent of the appropriation. Accompanying this report are the following documents:

A.—Map of the State, showing the progress of surveys.

B.—Report of surveying operations in this district during the past fiscal year.



C.—Statement of the present condition of contracts not closed at date of last annual report.

D.—Report of plats furnished the district land office.

E.—Reports of deposits for special surveys.

F.—Estimate of appropriations required for the office of the surveyor general and for continuing the public surveys within the district for the fiscal year ending June 30, 1874.

All of which is respectfully submitted.

Very respectfully, your obedient servant,

M. S. STEARNS,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



B.—Report of surveying operations in the district of Florida during the year ending June 30, 1872, showing the present condition of contracts made since date of last annual report.

86

Names of deputies.	No. of contract.	Date of contract.	Kind of work.	Locality of work.		Time allowed.	When returned.	When forwarded.	Amount.			Remarks.
				Township south.	Range east.				Miles.	Chains.	Links.	
Samuel Hamblen ....	8	Nov. 20, 1871	Subdivisions...	41, 42, 43, 44, and 45. 34, 35, 41, 42, 43, 44, and 45. 35 and 41..... 41, 42, and 43 .....	22 and 23 24 25 26	June 1, 1872	June —, 1872	July 22, 1872	1,002	31	87	As the subdivisions of the townships north of the river overrun the number of miles estimated in his contract, the deputy did not run any lines south of the river. They were afterward run by Deputy William Lee Apthorp, under his contract, No. 9. Contract closed. Work forwarded; contract closed, and deputy's account sent to Treasury for payment.
			Township lines	43..... 44..... Lying north of the Caloosahatchie River.	25 and 26 24, 25, and 26							
William L. Apthorp..	9	Dec. 23, 1871	Standard meridian.	From Caloosahatchie River south, at such point as the deputy should find most practicable.		July 1, 1872	July 1, 1872	July 31, 1872	38	40	00	
			Correction parallel.	Between township 46 and 47, from the standard meridian east to the marshes of Lake Okechobee and west to the Gulf of Mexico.		July 1, 1872	July 1, 1872	July 31, 1872	55	60	00	
			Township lines	Beginning south of the Caloosahatchie River, at the standard meridian, and survey east and west of said line, until he should run 563 miles of township lines.		July 1, 1872	July 1, 1872	July 31, 1872	466	04	67	
M. A. Williams.....	10	Jan. 3, 1872	Subdivisions...	Survey of the keys lying within townships 57 to 62 south, ranges 38 to 42 east.		July 1, 1872	Aug. 17, 1872	.....	.....	.....	.....	Office work not yet completed.
J. A. Macdonald.....	11	May 24, 1872	Subdivisions...	Section 15, township 17 south, range 29 east, and sections 16 and 17, township 19 south, range 31 east. Special deposit.		Sept. 1, 1872	.....	.....	.....	.....	.....	Not yet reported.

Respectfully submitted.

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, September 25, 1872.

M. L. STEARNS, *Surveyor General.*



C.—Statement showing the present condition of contracts not closed at date of last annual report.

Names of deputies.	No. of contract.	Date of contract.	Kind of work.	Locality.		Time allowed.	Miles surveyed.			Remarks.
				Township south.	Range east.		Miles.	Chains.	Links.	
M. A. Williams .....	6	April 24, 1871	Subdivision ...	45..... 46.....	41, 42, and 43 41	Sept. 1, 1871. Work interrupted by losing supplies on Lake Worth in a storm, and time extended to June 1, 1872.	205	60	71	Work reported June 1.
Charles F. Smith.....	7	April 29, 1871	Private claim .	Dupont's hummock.		Aug. 1, 1871. Extended to April 1, 1872.	....	....	....	The party interested, Mr. Westcott, having failed to furnish the necessary <i>data</i> to enable the deputy to locate this grant, it is recommended that it be canceled.

Respectfully submitted.

M. L. STEARNS, *Surveyor General.*

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, September 25, 1872.



D.—*Report of plats furnished the district land office during the year ending June 30, 1872.*

Township south.	Range east.	When furnished.	Remarks.
39, 40, 41, 42, and 43.....	27, 28 and 29	Aug. 8, 1871	Survey of J. H. Stearns.
8.....	22	Sept. 9, 1871	Section 6. Amended subdivision.
39, 40, 41, and 42.....	30	Oct. 24, 1871	Survey of James D. Taumehill.
40, 41, and 42.....	31		
39, 40, 41, and 42.....	32		
39 and 40 .....	33		

Respectfully submitted.

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, September 25, 1872.

M. L. STEARNS,  
*Surveyor General.*

E.—*Report of deposits made by individuals for special surveys during the year ending June 30, 1872.*

Depositors.	Deposits.			Surveys.	Remarks.
	Amount.		Place.		
John G. Long.....	<i>Field work.</i> \$5 00	<i>Office work.</i> \$5 00	United States assistant treasurer, Charleston, S. C.	July 28, 1871	Survey of a lot of unsurveyed marsh in section 18, township 7 south, range 30 east.
William M. Humphreys....	15 00	10 00	United States assistant treasurer, Charleston, S. C.	July 24, 1871	Sections 16 and 17, township 19 south, range 31 east.

Respectfully submitted.

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, September 25, 1872,

M. L. STEARNS,  
*Surveyor General.*



F.

*Estimate of appropriations required for the United States surveyor general's office, district of Florida, and for continuing the public surveys within said district, for the fiscal year ending the 30th day of June, 1874.*

For salary of surveyor general.....	\$2, 000
For salary of chief clerk.....	1, 600
For salary of draughtsman.....	1, 400
For salary of transcribing clerk.....	1, 200
For contingent expenses.....	1, 500
Total for office.....	7, 700
For surveying exterior and subdivision lines, resurveys, and scrap-work.....	12, 000
Aggregate .....	19, 700

Respectfully submitted.

M. L. STEARNS,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Tallahassee, Florida, July 13, 1872.

### C.—Report of the surveyor general of Minnesota.

SURVEYOR GENERAL'S OFFICE,  
Saint Paul, Minnesota, September 26, 1872.

SIR: In compliance with your instructions, bearing date of April 5, 1872, I have the honor to submit herewith, in duplicate, the usual annual report of the surveying operations in this district, and statements of the amount of office work performed since the close of the last annual report to September 1, 1872, together with full tabular statements showing the present condition of field work, and the amount of office work performed during the year.

All the surveys embraced in contracts undertaken and uncompleted at the close of the last annual report have been executed, the notes returned to this office, examined and approved, the original plats constructed and copied, and, with transcripts of the field notes, transmitted to the general and local land offices. The table herewith transmitted, marked A, will show the progress and condition of all surveys embraced in contracts entered into since my last annual report. The deputies now in the field are believed to be making good progress, and to be making more than usual effort to complete their contracts within the time fixed therein, and in a manner that will be entirely satisfactory.

The season has not, however, so far been favorable for prosecuting work in the field, particularly in the Red River Valley, owing to the great amount of rain that has fallen, causing the valley to overflow to an unusual extent; more timber and brush is also found here than was anticipated, making the surveys slower and more expensive than was hoped for. Referring to my advance estimates of the appropriation required for field work for the fiscal year ending June 30, 1874, I have to say that the standard and township lines now run in that portion of the State reckoned west of the fifth principal meridian, are but little in advance of the subdivisions, and for that reason I have estimated somewhat largely for the extension of these lines. It is found to be better and much more convenient that the standard and township lines be run at least one year in advance of the subdivisions.

Trespasses on the public lands in the pine regions still continue to some extent, and undoubtedly will until these lands are disposed of, or more severe penalties are exacted. I shall continue to do what can be done under the present regulations to prevent spoliations on these lands, but cannot hope to be entirely successful, so long as there is a possibility of escaping detection and the temptation remains. The swamp lands have been selected up to and including the surveys of 1871, and the lists of those not heretofore forwarded to the Commissioner are in the hands of the officers of the local land offices for correction, and will be transmitted to the General Land Office so soon as returned from the local offices.

The following summary of the amount of office business performed since the close of my last annual report is presented:

Of standard lines, 450 miles 19 chains and 21 links have been examined and approved,



and diagrams and transcripts of field notes made and transmitted, and the same of 529 miles 28 chains and 12 links of township and range lines.

The original notes of 9,713 miles 28 chains and 47 links of subdivisional and meander lines have been examined, the original and commissioners' plats made and transmitted to the general and local land offices.

One hundred and thirty-nine (139) original plats have been constructed and placed on file in this office, and the like number of duplicates made and transmitted to the General Land Office, and 228 copies made and sent to the local offices, making an aggregate of 506 plats transmitted or filed in this office.

Thirteen thousand nine hundred and four (13,904) pages of transcripts for the General Land Office and for record in this office have been made, compared, and indexed, with full title page to each township.

For the local land offices and for record in this office there has been made 295 descriptive sheets, giving the establishment of exterior, interior, and meander courses, with description of soil, timber, &c.

The usual miscellaneous business has been performed, such as preparing contracts with deputies, with instructions and diagrams, making and recording accounts, the general correspondence, and recording the same.

The tables accompanying this report and constituting a part thereof will, it is believed, show fully and accurately the present condition of the field and office work, and the amount accomplished for the year ending September 1, 1872, and are designated as follows:

A. Amount, character, locality, and present condition of the surveys undertaken since the close of the last annual report.

B. Statement of original, Commissioner's, and register's plats made and copied, with date of transmission to the general and local land offices.

C. Statement of townships surveyed since the 1st day of September, 1871, showing the area and number of miles run in each.

D. Estimate of appropriations required for the fiscal year ending June 30, 1874.

E. Abstract statement of the incidental expenses of the office for the fiscal year ending June 30, 1872.

I am, very respectfully, your obedient servant,

C. T. BROWN,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



A.—Statement showing the amount, character, locality, and present condition of the surveys in Minnesota undertaken since September 1, 1871, the close of the last annual report.

Names of deputies.	Date of contract.	Character of work.	Amount and locality.	Present condition.
Edward Bureau.....	Sept. 18, 1871	Meanders .....	Meander lines of an island in section 22, township 104 north, range 39 west.	Surveys completed, and notes and plats transmitted.
George W. Cooley.....	Sept. 22, 1871	.....do .....	Meander lines of an island in section 22, township 117 north, range 23 west.	Do.
Walker & Allen .....	Oct. 27, 1871	Subdivisions.....	Subdivision lines of townships 52 and 53 north, range 25 west.....	Do.
Christian Wieland .....	Jan. 8, 1872	Meridian, township lines, and subdivisions.	Meridian line from township 56 north, between ranges 11 and 12 west of 4th principal meridian, due north 24 miles; exterior boundaries of township 60 north, ranges 12 and 13 west, 4th principal meridian, and subdivisions of same townships.	Surveys completed.
Edward D. Atwater....	Jan. 12, 1872	Meanders .....	Meander lines of an island in section 31, township 121 north, range 24 west.	Surveys completed; notes and plats transmitted.
John O. Brumris.....	Feb. 27, 1872	.....do .....	Meander lines of an island in sections 12 and 13, township 116 north, range 25 west.	Do.
Samuel E. Stebbins ....	Mar. 1, 1872	.....do .....	Meander lines of islands in section 1, township 136 north, range 44 west.	Do.
Charles Scott .....	May 31, 1872	Subdivisions.....	Subdivision and meanders of township 138 north, range 39 west....	Do.
Walker, Allen & Putnam, and Barnes.	June 21, 1872	Township lines and subdivisions.	Township lines between townships 145 and 146 north, ranges 43, 44, and 45 west; between townships 146 and 147 north, ranges 43, 44, and 45 west; between townships 147 and 148 north, ranges 39, 40, 41, 42, 43, 44, and 45 west. Range lines between ranges 39 and 40, 40 and 41, 41 and 42, 42 and 43 west, townships 147 and 148 north; range lines between ranges 43 and 44, 44 and 45, west, townships 145, 146, 147, and 148 north. Township lines between townships 149 and 150, 150 and 151, ranges 46, 47, and 48 west; between townships 151 and 152, 152 and 153 and 154 north, ranges 46 and 47 west. Range lines between 46 and 47, 47 and 48 west, townships 149, 150, 151, 152, and 153 north; and range lines between ranges 48 and 49 west, townships 149 and 150 north. Subdivision of townships 147 and 148 north, ranges 39, 40, 41, and 42; townships 145, 146, 147, and 148 north, ranges 43, 44, and 45; townships 149, 150, 151, 152, and 153, ranges 46 and 47 west; and townships 149 and 150 north, range 48 west.	Depnties in the field; no returns.
Stuntz & Ward .....	June 25, 1872	Meridian, standard, and township lines.	Sixth guide meridian, from the 12th standard parallel to the international boundary; the 13th, 14th, and 15th standard parallels, from the 6th guide meridian to the Red River. Township lines between townships 161 and 162, 162 and 163 north, ranges 46, 47, 48, 49, 50, and 51. Range lines between ranges 46 and 47, 47 and 48, 48 and 49, 49 and 50, 50 and 51, townships 161 and 162 north.	Surveys completed, and notes returned.
Merrill, Van Fleet, Kyes, & Van Solen.	June 25, 1872	Township lines and subdivisions.	Townships 146 and 147, 147 and 148 north, ranges 46, 47, 48, and 49. Range lines between ranges 46 and 47, 47 and 48, 48 and 49, townships 146, 147, and 148. Township lines between townships 149 and 150, 150 and 151, ranges 49 and 50; between 151 and 152, ranges 48, 49, and 50. Range lines 49 and 50, townships 149 and 150; range lines 48 and 49, 49 and 50, townships 151 and 152.	Depnties in the field; no returns.



## A.—Statement showing the amount, character, locality, and present condition of the surveys in Minnesota, &amp;c.—Continued.

Names of deputies.	Date of contract.	Character of work.	Amount and locality.	Present condition.
Merrill, Van Fleet, Kyes & Van Solen—Continued.	June 25, 1872	Township lines and subdivisions.	Township lines between townships 153 and 154, ranges 48, 49, and 50; township lines between townships 154 and 155, 155 and 156, ranges 46, 47, 48, 49, and 50. Range lines between ranges 46 and 47, 47 and 48, townships 154, 155, and 156; range lines between ranges 48 and 49, 49 and 50, 50 and 51, townships 153, 154, 155, and 156. Subdivision of townships 146, 147, and 148 north, ranges 46, 47, 48, and 49; townships 149 and 150, ranges 49 and 50; townships 151 and 152, ranges 48, 49, and 50; township 153, ranges 48, 49, and 50; townships 154 and 155, ranges 46, 47, 48, 49, and 50; and townships 156 north, ranges 47, 48, 49, and 50.	Deputies in the field; no returns.
Josias R. King .....	June 25, 1872	Subdivisions .....	Subdivision of townships 44, 45, and 46 north, ranges 22 and 23 west, 4th principal meridian.	Deputy in the field; no returns.
Humason & Erwin .....	June 26, 1872	Township lines and subdivisions.	Township lines between townships 157 and 158, 158 and 159, ranges 46, 47, 48, 49, 50, and 51. Range lines between ranges 46 and 47, 47 and 48, 48 and 49, 49 and 50, 50 and 51, townships 157 and 158 north. Subdivision of township 156 north, range 46 west; townships 157 and 158 north, ranges 46, 47, 48, 49, 50, and 51 west.	Deputies in the field; notes of a portion of township lines returned.
John B. Fish .....	July 6, 1872	.....do .....	Township lines between townships 159 and 160 north, ranges 46, 47, and 48 west. Range lines between ranges 46 and 47, 47 and 48 west, townships 159 and 160 north; range line between ranges 48 and 49 west, township 159 north. Subdivision of townships 159 and 160 north, ranges 46 and 47 west; and township 159 north, range 48 west.	Deputy in the field; no returns.
Hayward & Griffin .....	July 10, 1872	.....do .....	Township lines between townships 142 and 143 north, range 26 west; township lines between townships 143 and 144 north, ranges 25 and 26 west. Range lines between ranges 25 and 26, township 143 north; and range lines between ranges 26 and 27 west, townships 142 and 143 north. Subdivision of township 143 north, range 25 west, and townships 142 and 143 north, range 26 west.	Township lines and subdivision of township 143 north, range 25 west, returned.
Back & Tyler .....	Aug. 7, 1872	.....do .....	Township lines between townships 159 and 160 north, ranges 49, 50, and 51. Range lines between ranges 48 and 49, township 160 north; and between ranges 49 and 50, 50 and 51 west, townships 159 and 160 north. Subdivision of township 160 north, range 48 west; townships 159 and 160 north, ranges 49, 50, and 51 west.	Deputies in the field; no returns.
Nathan Butler .....	Aug. 12, 1872	.....do .....	The east, north, and west exterior boundaries of township 57 north, range 25 west. Subdivision of township 57 north, range 25 west, 4th principal meridian.	Deputy in the field; no returns



B.—Statement of original, Commissioner's, and register's plats made and copied, date of transmission to the general and local land offices, from September 1, 1871, to September 1, 1872.

Township	Range.	Land-office.	Original.	Commissioner's.	Date of transmission.	Register's.	Date of transmission.	Total.
140	31	Saint Cloud				1	Sept. 6, 1871	1
135	35	do				1	do	1
54	13	Du Luth.				1	Oct. 30, 1871	1
55	13	do				1	do	1
135	31	Saint Cloud				1	Dec. 1, 1871	1
133	28	do				1	Dec. 7, 1871	1
133	36	Alexandria				1	Dec. 15, 1871	1
134	36	do				1	do	1
135	36	do				1	do	1
136	36	do				1	do	1
138	36	do				1	do	1
138	37	do				1	do	1
138	38	do				1	do	1
138	40	do				1	do	1
136	31	Saint Cloud				1	do	1
137	31	do				1	Jan. 6, 1872	1
134	35	do				1	Feb. 19, 1872	1
47	25	do				1	do	1
137	41	Alexandria				1	Mar. 21, 1872	1
137	43	do				1	do	1
138	43	do				1	do	1
137	44	do				1	do	1
138	44	do				1	do	1
125	45	do				1	do	1
126	45	do				1	do	1
137	45	do				1	do	1
126	46	do				1	do	1
46	24	Saint Cloud				1	do	1
47	24	do				1	do	1
48	24	do				1	do	1
49	24	do				1	do	1
50	24	do				1	do	1
46	25	do				1	do	1
139	45	Alexandria				1	April 11, 1872	1
139	46	do				1	do	1
121	41	Litchfield				1	April 19, 1872	1
121	42	do				1	do	1
121	43	do				1	do	1
121	44	do				1	do	1
122	41	do				1	do	1
122	42	do				1	do	1
122	43	do				1	do	1
122	44	do				1	do	1
122	45	do				1	do	1
122	46	do				1	do	1
122	47	do				1	do	1
122	48	do				1	do	1
123	44	do				1	do	1
123	45	do				1	do	1
123	46	do				1	do	1
123	47	do				1	do	1
123	48	do				1	do	1
123	49	do				1	do	1
124	44	do				1	do	1
124	45	do				1	do	1
124	46	do				1	do	1
124	47	do				1	do	1
124	48	do				1	do	1
124	49	do				1	do	1
136	42	Alexandria				1	April 24, 1872	1
125	44	do				1	do	1
126	44	do				1	do	1
125	46	do				1	do	1
125	47	do				1	do	1
126	47	do				1	do	1
125	48	do				1	do	1
126	48	do				1	do	1
125	49	do				1	do	1
126	49	do				1	do	1
49	25	Saint Cloud				1	May 10, 1872	1
50	25	do				1	do	1
47	28	do				1	do	1
134	27	do				1	do	1
135	28	do				1	do	1



## B.—Statement of original, Commissioner's, and register's plat, made, &amp;c.—Continued.

Township.	Range.	Land-office.	Original.	Commissioner's.	Date of transmission.	Register's.	Date of transmission.	Total.
136	28	Saint Cloud				1	May 10, 1872	1
136	29	do				1	do	1
133	30	do				1	do	1
134	32	do				1	do	1
139	32	do				1	do	1
140	32	do				1	do	1
138	33	do				1	do	1
136	34	do				1	do	1
46	26	do				1	May 27, 1872	1
46	27	do				1	do	1
47	26	do				1	do	1
47	27	do				1	do	1
136	30	do				1	do	1
137	30	do				1	do	1
137	32	do				1	do	1
138	32	do				1	do	1
136	35	do				1	do	1
54	12	Du Luth				1	May 31, 1872	1
55	12	do				1	do	1
47	20	do				1	do	1
46	21	do				1	do	1
47	21	do				1	do	1
48	23	do				1	do	1
138	45	Oak Lake				1	June 14, 1872	1
140	45	do				1	do	1
138	46	do				1	do	1
140	46	do				1	do	1
141	46	do				1	do	1
142	46	do				1	do	1
138	47	do				1	do	1
141	47	do				1	do	1
142	47	do				1	do	1
47	22	Du Luth	1	1	Sept. 20, 1871	1	Jan. 17, 1872	3
47	23	do	1	1	do	1	do	3
139	39	Oak Lake	1	1	do	1	June 14, 1872	3
140	39	Alexandria	1	1	do	1	Jan. 25, 1872	3
139	40	do	1	1	do	1	Dec. 15, 1871	3
140	40	Oak Lake	1	1	do	1	June 14, 1872	3
140	41	do	1	1	do	1	do	3
140	42	do	1	1	do			2
140	43	do	1	1	do	1	June 14, 1872	3
137	39	do	1	1	Oct. 9, 1871	1	do	3
138	41	Alexandria	1	1	do	1	Mar. 21, 1872	3
139	44	do	1	1	do	1	do	3
140	44	do	1	1	do	1	do	3
49	19	Du Luth	1	1	Oct. 10, 1871	1	May 31, 1872	3
48	20	do	1	1	do	1	do	3
49	20	do	1	1	do	1	do	3
141	44	Oak Lake	1	1	Oct. 14, 1871	1	June 14, 1872	3
142	44	do	1	1	do	1	do	3
143	44	do	1	1	do	1	do	3
141	45	do	1	1	do	1	do	3
142	45	do	1	1	do	1	do	3
137	40	Alexandria	1	1	Nov. 7, 1871	1	Dec. 15, 1871	3
139	42	do	1	1	do			2
139	43	do	1	1	do	1	Dec. 15, 1871	3
141	43	Oak Lake	1	1	do	1	June 14, 1872	3
142	43	do	1	1	do	1	do	3
113	44	New Ulm	1	1	Nov. 13, 1871	1	May 4, 1872	3
113	45	do	1	1	do	1	do	3
113	46	do	1	1	do	1	do	3
116	43	Litchfield	1	1	Nov. 28, 1871	1	April 5, 1872	3
116	44	do	1	1	do	1	do	3
117	44	do	1	1	do	1	do	3
116	45	do	1	1	do	1	do	3
117	45	do	1	1	do	1	do	3
116	46	do	1	1	do	1	do	3
117	46	do	1	1	do	1	do	3
118	46	do	1	1	do	1	do	3
49	18	Du Luth	1	1	Dec. 14, 1871	1	May 31, 1872	3
59	18	do	1	1	do	1	do	3
51	18	do	1	1	do	1	do	3
52	18	do	1	1	do	1	do	3
53	18	do	1	1	do	1	do	3
142	40	Alexandria	1	1	Dec. 27, 1871			2



## B.—Statement of original, Commissioner's, and register's plats made, &amp;c.—Continued.

Township.	Range.	Land office.	Original.	Commissioner's.	Date of transmission.	Register's.	Date of transmission.	Total.
143	41	Alexandria	1	1	Dec. 27, 1871			2
140	35	Saint Cloud	1	1	Jan. 11, 1872	1	May 27, 1872	3
139	36	Alexandria	1	1	do	1	Mar. 21, 1872	3
140	36	do	1	1	do	1	do	3
139	37	do	1	1	do	1	do	3
140	37	do	1	1	do	1	do	3
130	36	do	1	1	do	1	Apr. 24, 1872	3
131	36	do	1	1	do	1	do	3
132	36	do	1	1	do	1	do	3
130	37	do	1	1	do	1	do	3
132	37	do	1	1	do	1	do	3
132	38	do	1	1	do	1	do	3
108	45	New Ulm	1	1	Jan. 12, 1872	1	May 4, 1872	3
104	46	Jackson	1	1	do	1	Apr. 8, 1872	3
105	46	do	1	1	do	1	do	3
108	46	New Ulm	1	1	do	1	May 4, 1872	3
109	46	do	1	1	do	1	do	3
110	46	do	1	1	do	1	do	3
104	47	Jackson	1	1	do	1	Apr. 8, 1872	3
105	47	do	1	1	do	1	do	3
108	47	New Ulm	1	1	do	1	May 4, 1872	3
136	41	Alexandria	1	1	Jan. 16, 1872	1	Apr. 24, 1872	3
135	42	do	1	1	do	1	do	3
137	42	do	1	1	do	1	Mar. 21, 1872	3
138	42	do	1	1	do	1	do	3
141	42	do	1	1	do			2
142	42	do	1	1	do			2
143	43	do	1	1	do			2
139	33	Saint Cloud	1	1	Jan. 17, 1872	1	May 10, 1872	3
140	33	do	1	1	do	1	do	3
139	41	Alexandria	1	1	Jan. 20, 1872	1	Mar. 21, 1872	3
131	37	do	1	1	Jan. 25, 1872	1	Apr. 24, 1872	3
131	38	do	1	1	do	1	do	3
132	39	do	1	1	do	1	do	3
139	38	Oak Lake	1	1	do	1	June 14, 1872	3
140	38	do	1	1	do	1	do	3
141	25	Saint Cloud	1	1	do	1	Mar. 21, 1872	3
142	25	do	1	1	do	1	do	3
144	42	Alexandria	1	1	Jan. 26, 1872			2
145	42	do	1	1	do			2
146	42	do	1	1	do			2
133	41	do	1	1	Feb. 17, 1872	1	Apr. 24, 1872	3
134	41	do	1	1	do	1	do	3
135	41	do	1	1	do	1	do	3
134	42	do	1	1	do	1	do	3
46	28	Saint Cloud	1	1	Feb. 23, 1872	1	May 10, 1872	3
47	29	do	1	1	do	1	do	3
47	30	do	1	1	do	1	do	3
143	40	Alexandria	1	1	Mar. 1, 1872			2
144	41	do	1	1	do			2
145	41	do	1	1	do			2
146	41	do	1	1	do			2
141	40	do	1	1	Mar. 12, 1872			2
141	41	do	1	1	do			2
142	41	do	1	1	do			2
144	43	Oak Lake	1	1	do	1	June 14, 1872	3
144	44	do	1	1	do	1	do	3
143	45	do	1	1	do	1	do	3
144	45	do	1	1	do	1	do	3
143	46	do	1	1	do	1	do	3
144	46	do	1	1	do	1	do	3
143	47	do	1	1	do	1	do	3
144	47	do	1	1	do	1	do	3
144	48	do	1	1	do	1	do	3
127	46	Alexandria	1	1	do	1	Apr. 24, 1872	3
128	46	do	1	1	do	1	do	3
127	47	do	1	1	do	1	do	3
128	47	do	1	1	do	1	do	3
140	26	Saint Cloud	1	1	do	1	May 10, 1872	3
141	26	do	1	1	do	1	do	3
109	44	New Ulm	1	1	Mar. 16, 1872	1	May 4, 1872	3
110	44	do	1	1	do	1	do	3
111	44	do	1	1	do	1	do	3
112	44	do	1	1	do	1	do	3
109	45	do	1	1	do	1	do	3



B.—Statement of original, Commissioner's, and register's plats made, &c.—Continued.

Township.	Range.	Land office.	Original.	Commissioner's.	Date of trans- mission.	Register's.	Date of trans- mission.	Total.
110	45	New Ulm.....	1	1	Mar. 16, 1872	1	May 4, 1872	3
111	45	do .....	1	1	do .....	1	do .....	3
112	45	do .....	1	1	do .....	1	do .....	3
111	46	do .....	1	1	do .....	1	May 16, 1872	3
112	46	do .....	1	1	do .....	1	do .....	3
109	47	do .....	1	1	do .....	1	May 4, 1872	3
110	47	do .....	1	1	do .....	1	do .....	3
111	47	do .....	1	1	do .....	1	do .....	3
112	47	do .....	1	1	do .....	1	do .....	3
114	44	do .....	1	1	Mar. 23, 1872	1	do .....	3
115	44	do .....	1	1	do .....	1	do .....	3
114	45	do .....	1	1	do .....	1	do .....	3
115	45	do .....	1	1	do .....	1	do .....	3
114	46	do .....	1	1	do .....	1	do .....	3
115	46	do .....	1	1	do .....	1	do .....	3
145	46	Alexandria .....	1	1	Mar. 26, 1872	1	June 14, 1872	3
145	47	do .....	1	1	do .....	1	do .....	3
145	48	do .....	1	1	do .....	1	do .....	3
145	49	do .....	1	1	do .....	1	do .....	3
52	25	Saint Cloud .....	1	1	Apr. 3, 1872	1	May 10, 1872	3
53	25	do .....	1	1	do .....	1	do .....	3
Total .....			139	139	.....	228	.....	506

C. T. BROWN, Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Saint Paul, Minnesota, September 26, 1872.

C.—Statement of townships surveyed from September 1, 1871, to September 1, 1872, showing the area and number of miles surveyed and run in each.

Number.	Town- ship.	Range.	Area.	No. of miles surveyed.		
				Mls.	chs.	lks.
1.....	47	22	22,881.74	61	56	75
2.....	47	23	23,932.88	61	16	56
3.....	139	39	19,852.15	74	50	77
4.....	140	39	17,206.77	86	49	63
5.....	139	40	20,163.93	89	63	11
6.....	140	40	16,917.44	100	77	77
7.....	140	41	20,115.28	88	26	82
8.....	140	42	21,016.74	74	44	88
9.....	140	43	21,664.89	70	28	82
10.....	137	39	20,209.64	76	45	79
11.....	138	41	15,296.99	90	79	02
12.....	139	44	21,934.54	88	26	82
13.....	140	44	22,148.83	65	1	68
14.....	49	19	22,733.82	69	65	58
15.....	48	20	22,571.43	69	14	01
16.....	49	20	22,751.49	65	24	65
17.....	141	44	22,923.28	61	16	79
18.....	142	44	23,008.62	59	78	26
19.....	143	44	22,983.49	59	74	44
20.....	141	45	20,800.33	57	08	27
21.....	142	45	20,682.66	56	74	54
22.....	137	40	18,167.70	108	34	47
23.....	139	42	20,278.79	101	56	42
24.....	139	43	19,907.33	107	11	57
25.....	141	43	22,714.29	64	63	84
26.....	142	43	23,037.11	60	1	17
27.....	113	44	23,132.38	60	14	15
28.....	113	45	23,280.10	60	50	71
29.....	113	46	21,090.70	62	27	48
30.....	49	18	22,263.60	74	4	10
31.....	50	18	22,734.76	68	59	23
32.....	51	18	22,616.53	73	55	00
33.....	52	18	22,294.88	67	16	66



## C.—Statement of townships surveyed from September 1, 1871, &amp;c.—Continued.

Number.	Town-ship.	Range.	Area.	No. of miles surveyed.		
				<i>Mls.</i>	<i>chs.</i>	<i>lks.</i>
34.....	53	18	21,921.25	59	11	74
35.....	142	40	18,285.87	181	5	77
36.....	143	41	22,723.54	175	65	84
37.....	140	35	20,720.69	66	63	09
38.....	139	36	22,811.49	62	70	62
39.....	140	36	22,396.16	66	9	58
40.....	139	37	21,568.52	66	77	26
41.....	140	37	22,722.32	61	15	71
42.....	130	36	23,176.36	60	25	34
43.....	131	36	21,831.63	77	19	77
44.....	132	36	23,005.03	60	45	34
45.....	130	37	17,759.00	62	22	29
46.....	132	37	23,025.21	69	78	66
47.....	132	38	22,870.95	63	11	76
48.....	108	45	23,468.29	61	60	06
49.....	104	46	23,100.92	61	25	53
50.....	105	46	23,048.16	60	1	05
51.....	108	46	22,959.70	61	0	02
52.....	109	46	23,062.91	60	0	16
53.....	110	46	23,040.61	60	2	52
54.....	104	47	7,788.18	22	57	32
55.....	105	47	4,852.06	12	31	84
56.....	108	47	4,588.07	12	18	64
57.....	136	41	18,233.54	124	71	51
58.....	135	42	20,822.29	101	76	80
59.....	137	42	16,894.12	87	57	07
60.....	138	42	19,114.91	97	56	36
61.....	141	42	23,840.91	171	54	86
62.....	142	42	23,785.04	179	28	36
63.....	143	43	23,091.72	60	7	87
64.....	139	33	19,462.38	82	27	13
65.....	140	33	18,569.92	92	49	67
66.....	139	41	19,645.71	95	27	00
67.....	131	37	21,500.36	85	4	58
68.....	131	38	21,854.87	77	6	05
69.....	132	39	20,910.25	78	89	34
70.....	139	38	20,922.19	65	64	04
71.....	140	38	18,754.21	67	30	11
72.....	116	43	23,078.21	60	36	18
73.....	116	44	22,901.25	60	10	11
74.....	117	44	23,070.85	60	5	12
75.....	116	45	23,190.65	60	61	31
76.....	117	45	23,684.47	60	71	50
77.....	116	46	21,304.22	59	68	90
78.....	117	46	18,295.16	50	47	37
79.....	118	46	18,510.64	48	79	83
80.....	141	25	22,715.05	61	67	45
81.....	142	25	22,707.20	64	34	73
82.....	144	42	24,005.55	174	5	70
83.....	145	42	24,007.79	173	66	96
84.....	146	42	23,694.16	177	51	35
85.....	133	41	16,679.32	128	58	96
86.....	134	41	18,862.97	118	27	76
87.....	135	41	15,897.21	105	63	49
88.....	134	42	20,880.00	115	27	13
89.....	46	28	20,437.11	86	17	96
90.....	47	29	11,177.48	48	24	03
91.....	47	30	579.10	4	52	62
92.....	143	40	21,521.63	181	51	42
93.....	144	41	22,342.22	174	77	24
94.....	145	41	23,277.17	169	61	88
95.....	146	41	22,103.00	176	13	20
96.....	141	40	21,431.67	186	65	41
97.....	141	41	22,532.07	179	42	22
98.....	142	41	21,836.77	188	57	66
99.....	144	43	23,055.24	60	6	78
100.....	144	44	23,041.64	60	11	48
101.....	143	45	20,626.88	56	70	73
102.....	144	45	20,677.02	57	5	48
103.....	143	46	23,009.92	59	14	58
104.....	144	46	23,019.05	61	27	74
105.....	143	47	22,708.51	59	38	00
106.....	144	47	22,756.84	60	51	85
107.....	144	48	22,918.82	60	41	69
108.....	127	46	22,961.66	59	72	58
109.....	128	46	23,075.70	60	59	67
110.....	127	47	14,782.90	46	23	55
111.....	128	47	10,407.35	32	48	97
112.....	140	26	20,128.02	81	68	02



C.—Statement of townships surveyed from September 1, 1871, &c.—Continued.

Number.	Town-ship.	Range.	Area.	No. of miles surveyed.		
				<i>Mls. chs. lks.</i>		
113.....	141	26	19, 296. 45	66	10	92
114.....	109	44	21, 405. 59	79	74	50
115.....	110	44	20, 964. 77	78	77	88
116.....	111	44	21, 692. 14	74	79	18
117.....	112	44	22, 119. 82	61	40	12
118.....	109	45	22, 444. 23	63	4	36
119.....	110	45	20, 558. 92	70	19	36
120.....	111	45	21, 948. 66	73	17	48
121.....	112	45	20, 713. 12	77	43	90
122.....	111	46	21, 664. 63	67	54	58
123.....	112	46	21, 664. 20	63	48	90
124.....	109	47	1, 509. 23	2	33	23
125.....	110	47	1, 500. 92	2	29	07
126.....	111	47	1, 439. 52	2	15	00
127.....	112	47	1, 122. 55	1	49	04
128.....	114	44	23, 012. 48	60	0	13
129.....	115	44	23, 082. 46	60	4	95
130.....	114	45	23, 216. 79	60	19	51
131.....	115	45	23, 025. 69	59	75	51
132.....	114	46	21, 420. 59	58	59	72
133.....	115	46	21, 347. 61	57	63	91
134.....	145	46	23, 078. 24	60	3	99
135.....	145	47	22, 961. 81	59	69	99
136.....	145	48	22, 818. 80	61	30	85
137.....	145	49	1, 400. 08	15	7	25
138.....	52	25	22, 834. 35	59	56	49
139.....	53	25	19, 233. 69	66	50	68
Total .....			2, 820, 190. 25	9, 713	28	47
1,465 previously reported.....			29, 278, 756. 79			
1,604 total number of acres surveyed to date.....			32, 098, 947. 04			

C. T. BROWN, *Surveyor General.*

SURVEYOR GENERAL'S OFFICE,  
*Saint Paul, Minnesota, September 26, 1872.*

D.—Estimate of appropriation required for continuing the public surveys in Minnesota for the fiscal year ending June 30, 1874.

For field work west of fifth principal meridian :

Extending the 3d, 4th, and 5th guide meridians 250 miles, at \$15 per mile.....	\$3, 750
Extending the 13th, 14th, and 15th standard parallels 355 miles, at \$15 per mile.....	5, 025
Running 600 miles township lines, at \$12 per mile.....	7, 200
Subdivision of 25 townships, 1,750 miles, at \$10 per mile.....	17, 500

For field work west of fourth principal meridian :

Extending the Ind. meridian 24 miles, at \$15 per mile.....	360
Extending the 8th correction line 142 miles, at \$15 per mile.....	2, 130
Running 200 miles township lines, at \$12 per mile.....	2, 400
Subdividing 18 townships, 1,263½ miles, at \$10 per mile.....	12, 635

Total.....	51, 000
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SALARIES.

For the salary of surveyor general.....	\$2, 000
For the salary of chief clerk.....	1, 500
For the salary of chief draughtsman.....	1, 300
For the salary of two assistant draughtsmen, (\$1,200 and \$1,100).....	2, 300
For the salary of three transcribing clerks, (\$1,200, \$1,100, and \$1,000).....	3, 300

Total.....	10, 400
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## INCIDENTAL EXPENSES.

For pay of messenger, office rent, stationery, fuel, &c..... \$2,200

C. T. BROWN,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Saint Paul, September 26, 1872.

E.—Abstract statement of the incidental expenses of the office for the fiscal year ending June 30, 1872.

For quarter ending September 30, 1871.....	\$531 70
For quarter ending December 31, 1871.....	481 55
For quarter ending March 31, 1872.....	454 05
For quarter ending June 30, 1872.....	584 75
	<hr/>
	2,052 05

C. T. BROWN,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Saint Paul, Minnesota, September 26, 1872.

D.—Report of the surveyor general of Dakota Territory.

OFFICE OF THE U. S. SURVEYOR GENERAL  
FOR THE DISTRICT OF DAKOTA,  
Yankton, September 30, 1872.

SIR: I have the honor to submit the following report, in duplicate, of the field and office work performed in this surveying district since the date of my last annual report, together with the usual statements relating thereto, and marked A, B, C, and D, accompanied by a map showing the progress of surveys in this district.

## SURVEYS.

1st. The third standard parallel from the 7th to the 9th guide meridian; the 8th and 9th guide meridians from the 2d to the 3d standard parallel, amounting to 132 miles 70 chains and 21 links.

2d. The township and range lines of townships Nos. 105, 106, 107, and 108 north, of ranges 53, 54, 55, 56, 57, 58, 59, 60, and 61 west of the 5th principal meridian, and townships Nos. 109, 110, 111, and 112 north, of ranges 60 and 61 west, amounting to 437 miles 55 chains and 78 links.

3d. The following described townships and fractional townships west of the 5th principal meridian have been subdivided into sections, viz: townships 109 and 110 north, of range 49; townships 109, 110, 111, and 112 north, of ranges 50 and 51; fractional townships 132 and 133 north of range 47; fractional townships 133, 134, 135, 136, 137, 138, 139, and 140, of range 48; township 132 north, of range 48; townships 134 and 135 north, of range 49; fractional townships 136, 137, 138, 139, and 140 north, of range 49; townships 135, 136, 137, 138, 139, 140, 141, 142, 143, and 144 north, of range 50; townships 136, 137, 138, 139, 140, and 141 north, of range 51; township 136 north, of range 52; amounting to 2,390 miles 51 chains and 7 links.

4th. The 177 lots previously reported as having been surveyed of the Yankton Indian reservation have been subdivided, amounting to 238 miles 2 chains and 86 links.

## OFFICE WORK.

1st. The field notes of the above described surveys have been carefully examined and approved.

2d. The field notes have been transcribed and diagrams made of the surveys of the above described standard and township lines, and transmitted to the General Land Office.

3d. The field notes of the subdivision of the above described townships have been protracted, triplicate maps of each one thereof constructed, the original maps filed in this office, the triplicate transmitted to the General Land Office. The duplicates of the first ten townships described have been transmitted to the local land office at Vermilion, and the balance are retained in this office.

4th. The field notes of each of the townships subdivided have been transcribed, the



transcripts carefully compared with the originals, prefaced by an index diagram, and transmitted to the General Land Office.

5th. Lists descriptive of the land and all the corners of the above described townships subdivided have been made, carefully compared with the original field notes, certified, and the first named ten townships transmitted to the local land office at Vermillion; the balance are retained in this office for further instructions.

6th. The field notes of the subdivision of the 177 lots of the Yankton Indian reservation have been transcribed; the transcripts have been carefully compared with the originals and transmitted to the General Land Office; triplicate maps have been constructed, the original filed in this office and the duplicate and triplicate transmitted to the General Land Office.

7th. The usual amount of miscellaneous business has been performed, such as preparing contracts and bonds, (in quadruplicate,) with instructions and diagrams of the exterior boundary of their surveys for the use of deputies, making out and recording their accounts and the accounts with the Government, the general correspondence of the office, and recording the same, together with other work; all of which occupies a large amount of time, but of which no regular or detailed statement can well be given.

#### MISCELLANEOUS.

Out of the appropriation for the fiscal year ending June 30, 1873, six contracts have been entered into for surveys in the valley of the Red River and in the vicinity of the Northern Pacific Railroad, estimated to amount to \$37,550; for surveys in the valley of the Big Sioux River and in the vicinity of the Winona and Saint Peter's Railroad, six contracts have been entered into, estimated to amount to \$19,600; and one contract has been entered into for surveys in the valley of Dakota River, estimated to amount to \$2,520. Three contracts have been entered into for surveys in the vicinity of the Winona and Saint Peter's Railroad, estimated to amount to \$9,000, to be paid for out of a special deposit of \$10,000 made by the Chicago and Northwestern Railway Company August 20, 1872.

A contract has been entered into for the survey of township 148 north of range 49 west of the 5th principal meridian, to be paid for out of a special deposit of \$360, made for that purpose by Frank Aymond and Walter J. Trail, October 3, 1871. The deputies are now all in the field. Returns of field notes for the subdivision of twenty-one townships have been returned to this office and are being platted and transcribed.

#### AGRICULTURAL.

The summer of 1872 has been the best for agriculture since the settlement began in Dakota. This improvement was due alike to the better condition of the farms, which increase in yield and improve in condition of tillage for several years after the native sod is broken, and to the very fine season, which was unusually warm and supplied with an abundant rainfall, well distributed throughout the period for plant growth. The establishment of stations in various parts of Dakota for meteorological observation and record will soon furnish *data* for a reliable judgment as to our climate and its conditions. The record of the present year will certainly convince any one that it has not been too dry at any time. In fact, the season has been better than in many parts of the country east of us, in the Mississippi Valley, about the lakes, or along the Atlantic sea-board. The crop of wheat was large, leaving a considerable surplus, which is passing into the eastern markets. The corn crop was also large and was well matured before frosts, leaving the evidence of a series of years conclusive in favor of the profitable production of that cereal in Dakota. The yield of oats was immense, and potatoes were abundant and fine, that being a staple crop which never fails, as the soil is peculiarly adapted to them. Rye, barley, sorghum, broom-corn, and all the varieties of garden products were fine, while continued experiments in tobacco culture and in winter wheat and small fruits gave good results.

#### IMMIGRATION.

The immigration to Dakota shows a steady increase, and the railroads now being constructed will greatly accelerate this. The preponderance of settlers have come to the eastern part of the Territory, into Union, Lincoln, Minnehaha, and Brookings Counties, while a very large settlement has been made in the rich valley of the Vermillion, in Clay and Turner Counties; a fair number has passed up the valleys of the Missouri and Dakota Rivers, and the railroads will greatly add to this tendency. It is natural, and to be expected, that the eastern part should first be filled.

#### RAILROADS.

The year is marked by the beginning of railroad building in the Territory, and, therefore, by the beginning of established commerce and wealth. The Dakota South-



ern Railroad from Sioux City, Iowa, is being rapidly built toward Yankton, the territorial capital. About ten miles of the track is laid, and the material is all at hand, and a heavy force of men are at work sufficient to finish it to Yankton this fall. This road will add greatly to the prosperity of all Southeastern Dakota. The Northern Pacific Railroad has completed about 120 miles in Dakota, and will have the track laid to the Missouri River within a few weeks. This will open to settlement a rich region along the Red and Dakota Rivers, the best part of Northern Dakota, suitable for a great variety of crops, and comparatively near the lake markets. The Winona and Saint Peter's Railroad Company have completed their road to the eastern line of Dakota, and have entered the Territory one mile south of the north line of township No. 115 north, of range 47 west, and the road will be completed this year to the Big Sioux River by Lake Kampeska, in township 117 north, of range 53 west, opening to immediate settlement a vast region heretofore untouched, comprising very rich lands in the valley of the Upper Sioux. The lands there are very fine in every characteristic; they are smoothly sloping and gently rolling prairies, with beautiful lakes of clear water filled with pickerel and other fish. There are also numerous springs of fresh water, and many small streams scattered over the country, and rendering it very attractive and feasible for settlement. One-half belongs to the railroad land grant, but this will be for sale at once. The alternate government sections afford an unusually fine opportunity for soldiers' homesteads. It is all now being surveyed, and the whole of it will be open for settlement in the spring of 1873. The region along the Big Sioux, from Sioux Falls northward, will all be settled in a short time, and there is no single body of lands elsewhere untouched, of such fertility and general advantage for those who immigrate from the northern parts of Europe or the United States.

Papers accompanying and forming a part of this report:

A. Estimate for the surveying service in this district for the fiscal year ending June 30, 1874.

B. Abstract account of the incidental expenses of the surveyor general's office for the fiscal year ending June 30, 1872.

C. Statement showing the number of townships surveyed in Dakota, and area of land therein.

D. Statement showing the amount, character, locality, and present condition of the surveys in Dakota, uncompleted at and undertaken since the date of my last annual report.

Very respectfully, your obedient servant,

WM. H. H. BEADLE,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*

A.—*Estimate of appropriations required for continuing the public surveys in the Territory of Dakota, for salaries of the surveyor general and the clerks in his office, (as per act of March 2, 1861,) and for the incidental expenses of the office, for the fiscal year ending June 30, 1874.*

For surveying standard parallels and guide meridians.....	\$12,000 00
For surveying township lines.....	20,000 00
For subdividing 276 townships.....	68,000 00
Total for surveys.....	100,000 00
For salary of surveyor general.....	\$2,000 00
For compensation of clerks in the office of the surveyor general.....	\$6,300 00
For rent of office for the surveyor general, fuel, books, stationery, and other incidental expenses.....	\$2,000 00

WM. H. H. BEADLE,  
*United States Surveyor General.*

SURVEYOR GENERAL'S OFFICE,  
*Yankton, Dakota Territory, September 30, 1872.*



B.—Abstract statement of the incidental expenses of the surveyor general's office for the fiscal year ending June 30, 1872.

For the quarter ending September 30, 1871.....	\$390 50
For the quarter ending December 31, 1871.....	398 14
For the quarter ending March 31, 1872.....	311 15
For the quarter ending June 30, 1872.....	367 97
	<u>1,467 76</u>

WM. H. H. BEADLE,  
United States Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Yankton, Dakota Territory, September 30, 1872.

C.—Statement of townships surveyed in the Territory of Dakota from July 1, 1871, to June 30, 1872.

Number.	Township.	Range.	Area.	Number.	Township.	Range.	Area.
	<i>North.</i>	<i>West.</i>			<i>North.</i>	<i>West.</i>	
1.....	109	49	22,956.90	26.....	138	49	23,152.43
2.....	110	49	22,898.26	27.....	139	49	23,192.84
3.....	109	50	22,364.96	28.....	140	49	22,145.51
4.....	110	50	22,661.76	29.....	135	50	22,846.76
5.....	111	50	22,779.39	30.....	136	50	22,821.97
6.....	112	50	22,945.47	31.....	137	50	22,895.85
7.....	109	51	22,875.28	32.....	138	50	22,911.68
8.....	110	51	22,710.14	33.....	139	50	22,956.16
9.....	111	51	20,854.26	34.....	140	50	22,645.58
10.....	112	51	22,893.80	35.....	141	50	23,102.65
11.....	132	47	7,808.48	36.....	142	50	22,997.01
12.....	133	47	7,030.96	37.....	143	50	23,051.10
13.....	132	48	22,771.91	38.....	144	50	22,404.95
14.....	133	48	22,995.94	39.....	136	51	22,459.05
15.....	134	48	10,536.52	40.....	137	51	23,074.01
16.....	135	48	5,468.54	41.....	138	51	23,024.51
17.....	136	48	3,551.85	42.....	139	51	23,048.74
18.....	137	48	1,385.37	43.....	140	51	22,554.31
19.....	138	48	2,046.32	44.....	141	51	23,220.10
20.....	139	48	2,514.83	45.....	136	52	22,522.68
21.....	140	48	2,766.30				
22.....	134	49	23,214.06				864,004.86
23.....	135	49	23,215.60	292 previously reported .....			5,565,535.35
24.....	136	49	22,793.29				
25.....	137	49	22,936.78	Total acres surveyed.....			6,429,540.21

WM. H. H. BEADLE,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Yankton, Dakota Territory, September 30, 1872.



D.—Statement showing the amount, character, locality, and the present condition of the surveys in Dakota, uncompleted at and undertaken since the date of the last annual report.

Name of deputy.	Date of contract.		Character of work.	Estimated cost of survey.	Cost of survey.	Locality.	Present condition.
Moses K. Armstrong...	Dec.	16, 1869	Subdivisions .....	\$5, 000 00	\$3, 000 82	Subdivision of a portion of the Yankton Indian reservation, for the purpose of allotment to such members of said tribe of Indians as desire to have lands set apart to them in severalty.	Survey completed and approved, and notes and maps transmitted.
Miles T. Woolley .....	June	27, 1871	Standard and township lines.	4, 400 00	4, 392 54	Between the first and third standard parallels, and between the seventh and ninth guide meridians west of the fifth principal meridian.	Surveys completed and approved, and notes and plats transmitted.
Joseph W. Blonding....	June	28, 1871	Subdivision lines.....	4, 400 00	.....	Fractional townships 138 to 142 north, inclusive, of range 48; fractional townships 138 to 144 north, inclusive, of range 49; and townships 137 to 140 north, inclusive, of range 50 west of the fifth principal meridian.	Surveys completed (except four townships) and approved, and notes and plats transmitted.
Richard F. Pettigrew...	June	29, 1871	Subdivision lines.....	1, 800 00	1, 800 00	Township 112 north, range 50, and townships 109, 110, 111, and 112 north, of range 51 west of the fifth principal meridian.	Surveys completed and approved, and notes and plats transmitted.
James C. Blanding and John Q. Burbank.	June	30, 1871	Subdivision lines.....	3, 530 00	3, 530 00	Townships 141, 142, 143, and 144 north, of range 50; townships 137, 138, 139, 140, and 141, of range 51; and township 136 north, of range 52 west of the fifth principal meridian.	Surveys completed and approved, and notes and plats transmitted.
Horace J. Austin.....	June	30, 1871	Subdivision lines.....	4, 070 00	4, 070 00	Townships 132 and 133 north, of ranges 47 and 48; townships 134, 135, 136, and 137 north, of ranges 48 and 49; townships 135 and 136 north, of range 50; and township 136 north, of range 51 west of the fifth principal meridian.	Surveys completed and approved, and notes and plats transmitted.
Ole B. Iverson.....	July	13, 1871	Subdivision lines.....	1, 800 00	1, 800 00	Townships 109 and 110 north, of range 49; and townships 109, 110, and 111 north, of range 50 west of the fifth principal meridian.	Surveys completed and approved, and notes and plats transmitted.
Shobal V. Clevenger and Augustus High.	July	3, 1872	Standard, township, and subdivision lines.	10, 000 00	.....	Eighth standard parallel from seventh to ninth guide meridian; eighth and ninth guide meridian from eighth to ninth standard parallel; township lines between the seventh and eighth guide meridians from the eighth to ninth standard parallel; subdivide townships 131 to 135 north, both inclusive, of ranges 51 and 52 west.	Deputies in the field have returned the field notes of ten townships of subdivisions to this office.
Richard O. Chaney.....	July	3, 1872	Township and subdivision lines.	4, 770 00	.....	Township lines between the ninth and tenth standard parallels from the seventh to eighth guide meridian; subdivide townships 137, 138, 139, and 140 north, of ranges 58 and 59 west.	Deputy in the field.



D.—Statement showing the amount, character, locality, and the present condition of the surveys in Dakota, &amp;c.—Continued.

Name of deputy.	Date of contract.		Character of work.	Estimat'd cost of survey.	Cost of survey.	Locality.	Present condition.
Alexander Anderson...	July	3, 1872	Township and subdivision lines.	\$5,150 00	.....	Township lines between the ninth and tenth standard parallels from the eighth to ninth guide meridians; subdivide township 137 north, of range 64; and townships 137, 138, 139, and 140 north, of ranges 65 and 66 west of the fifth principal meridian.	Deputy in the field.
Miles T. Woolley.....	July	5, 1872	Standard and township lines.	6,000 00	.....	South and west of the Sisseton and Wahpeton Indian reservation.	Deputy in the field.
George G. Beardsly and Charles Scott.	July	5, 1872	Standard, township, and subdivision lines.	8,000 00	.....	The ninth and tenth standard parallels from the seventh guide meridian to the Missouri River; the eighth, ninth, tenth and eleventh guide meridians from the ninth to tenth standard parallel; township lines between the ninth and tenth standard parallels from the tenth guide meridian to the Missouri River; and subdivide a few townships at the crossing of the Missouri River by the Northern Pacific Railroad.	Deputies in the field.
John P. Knight.. ..	July	5, 1872	Standard, township, and subdivision lines.	3,630 00	.....	The eleventh standard parallel from the seventh to eighth guide meridian; the eighth guide meridian from the tenth to eleventh standard parallel; the township lines between the tenth and eleventh standard parallels from the seventh to the eighth guide meridian; subdivide three townships in the valley of Cheyenne River.	Deputy in the field.
Horace J. Austin .....	July	6, 1872	Subdivisions.....	6,000 00	.....	In the valley of the Red River of the North...	Deputy in the field returned the notes of eight townships.
James H. Burdick .....	July	9, 1872	Subdivisions.....	4,000 00	.....	Townships 109 to 113, of ranges 47 and 48; and townships 111 to 113, of range 49 west.	Deputy in the field.
Richard F. Pettigrew and Ole B. Iverson.	July	17, 1872	Standard, township, and subdivision lines.	4,090 00	.....	Between the Dakota River and the Minnesota State line, including the lands granted to the Winona and Saint Peter's Railroad Company.	Deputies in the field.
John Langness .....	July	17, 1872	Subdivisions.....	2,160 00	.....	Township 114 north, of range 48; townships 114, 115, and 116, of range 49; and townships 115 and 116, of range 50.	Deputy in the field.
Melvin Grigsby.....	July	19, 1872	Subdivisions.....	2,520 00	.....	Townships 105, 106, 107, and 108 north, of range 60; and townships 106, 107, and 108, of range 61 west.	Deputy in the field.
Horace J. Austin .....	July	23, 1872	Subdivisions.....	360 00	.....	Fractional township 148 north, of range 49 west.	Deputy in the field.
Robert S. Alexander...	August	3, 1872	Subdivisions.....	750 00	.....	Townships 106 and 107 north, of range 53 west.	Deputy in the field.



Edwin H. Van Antwerp and James C. Bland- ing.	August 16, 1872	Subdivisions.....	2, 600 00	.....	Townships 113, 114, and 115 north, of range 52; and townships 114, 115, 116, 117, and 118 north, of range 53 west of the fifth princi- pal meridian.	Deputies in the field have returned the field-notes of three townships to this office.
William A. Olmsted ...	August 21, 1872	Subdivisions.....	2, 700 00	.....	Townships 118 and 119 north, of ranges 47, 48, 49, and 50 west of the fifth principal meridian.	Deputy in the field.
William M. Vinson.....	August 21, 1872	Subdivisions.....	2, 700 00	.....	Townships 114, 115, 116, and 117, of range 49; townships 115, 116, and 117, of range 48; and township 117 north, of ranges 49 and 50 west.	Deputy in the field.
Edwin H. Van Antwerp and James C. Bland- ing.	August 22, 1872	Subdivisions.....	3, 600 00	.....	Township 120 north, of ranges 49 and 50; townships 117, 118, 119, and 120 north, of range 51; and townships 116, 117, 118, 119, and 120 north, of range 52 west of the fifth principal meridian.	Deputies in the field.

SURVEYOR GENERAL'S OFFICE,  
Yankton, Dakota Territory, September 30, 1872.

WM. H. H. BEADLE,  
*United States Surveyor General.*



*E.—Report of the surveyor general of Nebraska.*

• SURVEYOR GENERAL'S OFFICE,  
Plattsmouth, Nebraska, September 25, 1872.

SIR: In compliance with your instructions of 1872, I have the honor to submit herewith (in duplicate) my annual report of the surveying operations in this district, for the fiscal year ending June 30, 1873.

## SURVEYS.

The surveys contracted for out of the appropriation of March 3, 1871, have been completed; also contract No. 33, of Messrs. Burch and Warner, made August 4, 1870, out of the appropriation of July 15, 1870, upon which time was extended until June 1, 1871. Eighteen contracts have been entered into for the survey of the public lands in this district, out of the appropriation of June 10, 1872, and the special deposits made by the Burlington and Missouri River Railroad Company in Nebraska, March 7, May 6, and May 22, 1872, of which a detailed statement is given in the accompanying tables, marked B No. 1 and B No. 2.

The deputies are in the field and progressing satisfactorily with their work, and, if uninterrupted, will complete all the surveys within the time specified in the contract.

## OFFICE WORK.

The field notes of 395 miles 20 chains and 12 links of exterior lines have been examined, approved, and transcripts and diagrams thereof made in duplicate, and transmitted to the Department.

The field notes of 133 townships of subdivision lines have been examined, approved, and transcripts and transcript plats made thereof, (in duplicate,) and transmitted to the Department and the proper local land offices.

Descriptive lists of 133 townships have been made and transmitted to the proper land offices.

Seventy volumes of field notes of surveys, including exterior and subdivision lines, have been paged, indexed, and bound.

The miscellaneous work, including correspondence, preparing contracts, estimates of costs of surveys, &c., has been larger than usual during the past year.

## PROPOSED SURVEYS.

The annual estimates for the surveying service in the district, for the fiscal year ending June 30, 1874, were prepared and transmitted July 25, 1872, in compliance with your instructions of April 5, 1872. The surveys proposed are located along the North Platte, Loupe, and Niobrara Rivers, and include some of the most valuable lands in the State. These lands are already in demand to supply the wants of the thousands seeking homes in this State.

Statistics obtained from reliable sources places the increase of population by immigration during the past year at fully 75,000. The year has been one of material development and prosperity, witnessing the completion of 250 miles of railway within the State, and occupation of a large portion of the public domain by hardy and industrious pioneers, and the production of an abundant crop of grain and fruits.

In conclusion, I have the honor to call your attention to the following statements, estimates, map, &c., accompanying this report:

A. Schedule showing the condition of the public surveys under the appropriation for the fiscal year ending June 30, 1872.

B 1. Schedule showing the contracts and condition of the public surveys under special deposits made by the Burlington and Missouri River Railroad Company during the fiscal year ending June 30, 1872.

B 2. Schedule showing the contracts and condition of the public surveys under the appropriation for the fiscal year ending June 30, 1873.

C 1. Statement showing the amount expended for salaries of surveyor general and clerks during the fiscal year ending June 30, 1872.

C 2. Statement showing the amount expended out of special deposits for office work made by the Burlington and Missouri River Railroad Company during the fiscal year ending June 30, 1872.

D. Statement showing the amount expended for rent of office and other incidental expenses, and condition of the account during the fiscal year ending June 30, 1872.

E. Statement showing the description of land, area, and number of miles for which duplicate plats and transcripts of field notes have been transmitted to the Department, and triplicate plats and descriptive lists have been furnished to the local land offices during the fiscal year ending June 30, 1872.



F. Statement showing the description and number of township plats and descriptive lists furnished to the different local land offices during the fiscal year ending June 30, 1872.

G. Estimate of sums required for the extension of the public surveys in the State for the fiscal year ending June 30, 1874.

H. Estimate of sums required for office expenses for the fiscal year ending June 30, 1874.

K. Sectional map of Nebraska, exhibiting the progress and condition of the public surveys for the fiscal year ending June 30, 1872.

All of which is respectfully submitted.

E. E. CUNNINGHAM,  
*Surveyor General Nebraska and Iowa.*

Hon. WILLIS DRUMMOND,  
*Commissioner of General Land Office, Washington, D. C.*



A.—Statement showing the condition of the public surveys under the appropriation for the fiscal year ending June 30, 1872.

Name of contractors.	Number of contract.	Date of contract.	Amount and locality.	Character of work and number of miles.		Rate.	Cost.	Date and amount of appropriation.		Present condition.
				Township.	Section.					
			<i>All north of base line, and west of sixth principal meridian.</i>					Appropriation Mar. 3, 1871.	\$40,000 00	
Daugherty & Parmelee.	42	May 20, 1871	Section lines of township 13, in ranges 51 to 56, inclusive; townships 13 to 16 inclusive, ranges 57 and 58; fractional township 12, ranges 51 to 59 inclusive; townships 13, 14, 15, and 16, in range 59.	<i>M. ch. lk.</i> .....	<i>M. ch. lk.</i> 1, 207 34 38	\$5	\$6,037 15	.....	.....	Survey completed, returned approved; plats and transcripts transmitted.
William A. Dougherty.	43	May 25, 1871	Section lines of township 9, ranges 29 to 32, inclusive; townships 9, 10, and 11, ranges 33 and 34.	.....	599 60 36	5	2,998 77	.....	.....	Survey completed, returned approved; plats and transcripts transmitted.
Daugherty & Cutler ...	44	May 23, 1871	Exterior lines of townships 9, 10, and 11, range 41.	24 12 62	.....	6	144 95	.....	.....	Survey completed, returned approved; plats and transcripts transmitted.
			Section lines townships 9, 10, and 11, in ranges 25 to 40 inclusive; township 11, range 41.	.....	1, 141 49 91	5	5,708 12	.....	.....	
			Exterior lines of townships 25 to 28 inclusive; ranges 11, 12, and 13.	126 14 56	.....	6	757 09	.....	.....	
Wiltse & Kendall.....	45	June 15, 1871	Section lines of townships 25 to 28, ranges 11 to 13 inclusive; townships 29, 30, and 31, range 13; townships 29 and 30, range 14.	.....	1, 021 39 12	5	5,107 45	.....	.....	Survey completed, returned approved; plats and transcripts transmitted.
			Exterior lines townships 29 to 32, ranges 11 to 13 inclusive; townships 29 and 30, range 14; fractional township 33, ranges 11, 12, & 13.	160 24 24	.....	6	961 82	.....	.....	



Richards & Gay... ..	46	June 15, 1871	{ Subdivision lines 29, 30, and 31, ranges 9 and 10. Townships 29, 30, 31, and 32, ranges 11 and 12. Township 32, range 13. Fractional township 33, ranges 11, 12, and 13.	.....	977 55 99	5	4, 888 50	.....	.....	{ Survey completed, returned approved; plats and transcripts transmitted.
			{ Exterior lines of township 16, between ranges 25 and 26, 26 and 27, 27 and 28, 28 and 29, 29 and 30, 30 and 31, 31 and 32.	42 55 79	.....	6	256 18	.....	.....	
Park & Campbell .....	47	June 16, 1871	{ Section lines of township 16, ranges 25 to 32 inclusive; township 16, ranges 35 to 42 inclusive.	.....	977 69 74	5	4, 889 35	.....	.....	{ Survey completed, returned approved; plats and transcripts transmitted.
			{ Exterior lines of townships 1, 2, 3, and 4, range 29.	41 73 91	.....	6	251 54	.....	.....	
George W. Fairfield....	48	June 17, 1871	{ Section lines of townships 1, 2, 3, and 4, ranges 27 and 28.	.....	513 48 17	5	2, 568 01	.....	.....	{ Survey completed, returned approved; plats and transcripts transmitted.
Stephenson & Slocum..	49	June 16, 1871	{ Section lines of township 102, ranges 20 to 24 inclusive; townships 1, 2, 3, and 4 inclusive, ranges 25 and 26.	.....	1, 112 18 54	5	5, 561 16	.....	.....	
			{ By amount charged to special deposit B. and M. R. R. Company of Daugherty & Parmelee's acc't by order of Commissioner General Land Office.	.....	.....	.....	.....	.....	\$130 09	
Totals .....				395 21 12	7, 551 56 21	.....	40, 130 09	.....	40, 130 09	

SURVEYOR GENERAL'S OFFICE, *Plattsmouth, Nebraska, September 25, 1872.*

E. E. CUNNINGHAM, *Surveyor General.*



B 1.—Statement showing the contracts and condition of public surveys under special deposits made by the Burlington and Missouri River Railroad Company during the fiscal year ending June 30, 1872.

Names of contractors.	Number of contract.	Date of contract.	Character of work.	Locality, (all north of the base line and west of the sixth principal meridian.)	Estimated cost.	Date and amount of deposit.		Present condition.
Stephenson & Slocum....	50	1872. April 5	Subdivisions.....	Townships 5, 6, 7, and 8, ranges 25, 26, 27, 28, and 29.	\$6,000 00	Special deposit by Burlington and Missouri River Railroad Company with assistant treasurer, Boston, Massachusetts, dated March 7, 1872, for field-work.	\$17,726 82	Survey completed in the field, and notes returned to this office.
Wiltse, Kendall & Court..	51	April 22	.....do.....	Townships 21, 22, 23, and 24, ranges 11, 12, 13, 14, and 15.	6,000 00	Special deposit by Burlington and Missouri River Railroad Company with First National Bank, Omaha, Nebraska, dated May 6, 1872, for field-work.	23,469 51	Do.
Keyes & Jamison.....	52	May 4	{ Exterior lines.... Subdivisions..... Standard lines....	{ Townships 1 to 4, range 30; townships 1 to 8, ranges 31 to 42, inclusive. Townships 5 and 6, range 30..... Establish third guide meridian from fourth to sixth standard parallel, fourth guide meridian from fourth to fifth standard parallel, fifth standard parallel from second to fourth guide meridian, sixth standard parallel from second to third guide meridian.	{ 5,875 00	.....	.....	Parties in the field.
Park & Campbell.....	53	May 10	{ Subdivisions.....	{ Township 14, ranges 21, 22, 23, and 24.	{ 3,360 00	.....	.....	Do.
Paul & Harvey.....	54	June 20	{ Exterior lines....	{ Townships 15 to 20, inclusive, ranges 17 to 24, inclusive.	{ 3,000 00	.....	.....	Do.
North & Beeker.....	55	June 22	{ Subdivisions.....	{ Township 17, range 17.	{ 6,000 00	.....	.....	Do.
Milner & Reasoner.....	57	June 26	.....do.....	Townships 15 and 16, ranges 21 to 24; townships 14, 15, and 16, ranges 17 to 20.	5,100 00	.....	.....	Do.
				Townships 1 to 4, ranges 29 to 32, inclusive.				



Pollard & Wells .....	60	June 28	.....do .....	Townships 1 and 2, range 37; townships 1 to 4, ranges 35 and 36.	3,300 00	.....	.....	Do.
Patrick & Stout.....	62	June 29	.....do .....	Townships 2 to 10, range 41; townships 2 to 10, range 42.	2,400 00	.....	.....	Do.
To amount paid Daugherty & Parmelee on contract				No. 42, dated May 20, 1871.....	130 09			
Total.....					41,165 09	.....	41,438 54	

SURVEYOR GENERAL'S OFFICE, *Plattsmouth, September 25, 1872.*

E. E. CUNNINGHAM, *Surveyor General.*



B 2.—Statement showing the contracts and condition of the public surveys under appropriation for fiscal year ending June 30, 1873.

Names of contractors.	No. of contract.	Date of contract.	Character of work.	Locality, (all north of the base line and west sixth principal meridian.)	Estimated cost.	Date and amount of appropriation.		Present condition.
Richards & Wilbur .....	56	1872. June 26	Subdivisions....	Townships 7 and 8, range 30; townships 5, 6, 7, and 8, ranges 31, 32, and 33; townships 6, 7, and 8, range 34.	\$6, 120 00	Appropriation of June 10, 1872.	\$60, 000 00	Parties in the field.
Wiltse, Kendall & Court.....	58	June 25	{ Standard lines .	Second guide meridian, townships 33 & 34.	13, 100 00			
			Exteriors .....	Townships 25 to 28 and 31 to 34, range 14; townships 25 to 34, ranges 15 and 16, or to Keha-Paha River.				
John B. Crosby .....	59	June 29	Subdivisions ...	Townships 25 to 28 and 31 to 34, range 14; townships 25 to 34, range 15; townships 21 to 34, range 16, or to Keha-Paha River.	3, 000 00			Do.
	Sheldon & Fairfield .....	61	June 28	.....do .....	Townships 1, 2, 3, and 4, ranges 33 and 34.	5, 800 00		
Patrick & Stout.....	62	June 29	.....do .....	Townships 3 and 4, range 37; townships 1, 2, 3, and 4, ranges 38, 39, and 40; township 1, ranges 41 and 42.	1, 200 00			Do.
			.....do .....	Townships 2 to 10, ranges 41 and 42. (Eight full townships charged to special deposit, amounting to \$2,400; balance, \$1,200, out of appropriation.)	9, 000 00		Do.	
Slocum, Stephenson & Slocum	63	June 29	.....do .....	Township 5, range 34; townships 5, 6, 7, and 8, ranges 35 to 40, inclusive.	6, 140 00			Do.
Daugherty & Parmelee .....	64	July 2	.....do .....	Townships 18, 19, and 20, range 17; townships 17 to 20, ranges 18, 19, and 20; township 17, range 21.	5, 545 00			Do.
Enos F. Gray & John N. Hays	65	July 11	{ Standard lines.	The fifth standard parallel, from fourth guide meridian to western boundary of State; the fifth, sixth, and seventh guide meridians, from fourth to fifth standard parallel.				
			Exterior lines..	Townships 17, 18, 19, and 20, ranges 41 to 48, inclusive.				
N. I. Paul and Robert Harvey.	66	Aug. 16	{ Standard lines .	Seventh and eighth standard parallels, from second to third guide meridian; the third guide meridian, from sixth to eighth standard parallel.	4, 536 00			Do.
			Exterior lines..	Townships 21 to 24, ranges 17 to 24, inclusive				
La Munyon & Campbell .....	67	Aug. 15	{ .....do .....	Townships 17 to 20, ranges 49 to 58, inclusive	5, 500 00			Do.
			Subdivisions...	Township 17, ranges 49, 50, 51, 52, 53, and 54				
Total.....					59, 941 00		60, 000 00	



© 1.—Statement showing the amount expended for salaries of surveyor general and clerks during fiscal year ending June 30, 1872.

May 12. By appropriation for salaries of surveyor general and clerks.....	\$8,300 00	
September 30. To first quarter, ending September 30, 1871.....	\$1,990 48	
December 31. To second quarter, ending December 31, 1871.....	2,213 33	
March 31. To third quarter, ending March 31, 1872.....	2,375 00	
June 30. To fourth quarter, ending June 30, 1872.....	1,721 19	
	<u>8,300 00</u>	<u>8,300 00</u>

E. E. CUNNINGHAM,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Plattsmouth, Nebraska, September 25, 1872.

© 2.—Statement showing amount expended out of special deposits for office work made by the Burlington and Missouri River Railroad Company during fiscal year ending June 30, 1872.

March 7. By certificate of deposit, No. 173, for \$3,646.34; No. 175, for \$476.17, with assistant treasurer United States, Boston, Massachusetts.....	\$4,122 51	
May 6. By certificates of deposit, Nos. 1751, 1753, 1755, 1757, 1759, 1761, 1763, 1765, and 1767, with First National Bank of Omaha.....	5,326 30	
May 22. By certificate of deposit, No. 1794, with First National Bank of Omaha .....	56 25	
June 30. To clerk hire .....	\$622 22	
June 30. Unexpended balance.....	8,882 84	
	<u>9,505 06</u>	<u>9,505 06</u>

E. E. CUNNINGHAM,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Plattsmouth, Nebraska, September 25, 1872.

D.—Statement showing the amount expended for rent of office and other incidental expenses and condition of account during fiscal year ending June 30, 1872.

March 12, 1871. By appropriation for rent of office and other incidental expenses.....	\$2,000 00	
September 30. To first quarter, ending September 30, 1871 .....	\$470 55	
December 31. To second quarter, ending December 31, 1871.....	462 66	
March 31. To third quarter, ending March 31, 1872 .....	339 72	
June 30. To fourth quarter, ending June 30, 1872.....	630 06	
June 30. Unexpended balance.....	97 01	
	<u>2,000 00</u>	<u>2,000 00</u>

E. E. CUNNINGHAM,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Plattsmouth, Nebraska, September 25, 1872.



E.—Statement showing the description of lands, area, and number of miles, for which duplicate plats and transcripts of field notes have been transmitted to the Department, and triplicate plats and descriptive lists have been furnished to the land offices, during the fiscal year ending June 30, 1872.

Number of township.	DESCRIP- TION.		Number of acres.	AMOUNT OF SURVEYS.			Number of township.	DESCRIP- TION.		Number of acres.	AMOUNT OF SURVEYS.		
	Township north.	Range west.		Miles.	Chains.	Links.		Township north.	Range west.		Miles.	Chains.	Links.
1	16	35	22,853.04	60	31	51	65	28	13	22,548.66	60	23	23
2	16	36	22,910.88	60	49	38	66	29	13	23,022.83	59	72	57
3	16	37	22,873.48	60	49	03	67	30	13	23,016.23	59	79	46
4	16	38	22,904.57	60	64	28	68	31	13	23,057.85	60	2	16
5	16	39	22,898.93	60	79	34	69	29	14	23,070.38	60	3	59
6	16	40	22,928.40	61	4	00	70	30	14	23,034.05	59	77	59
7	16	41	22,899.57	60	5	99	71	1	20	23,070.45	60	4	26
8	16	42	21,324.86	68	16	06	72	1	21	23,034.44	59	79	84
Including	mean	ders		9	42	20	73	1	22	23,015.72	59	78	82
				13	93	74	1	23	23,208.63	59	78	60	
9	16	25	22,991.70	61	13	93	74	1	23	23,208.63	59	78	60
10	16	26	22,964.37	60	75	94	75	2	20	23,013.50	62	61	08
11	16	27	22,974.61	60	61	46	76	2	21	23,038.54	59	79	02
12	16	28	22,894.49	60	42	84	77	2	22	23,033.56	59	79	29
13	16	29	22,886.68	60	26	25	78	2	23	22,952.30	59	70	91
14	16	30	22,943.40	60	16	86	79	1	24	23,065.98	60	4	87
15	16	31	22,982.99	60	12	48	80	2	24	23,114.66	60	10	25
16	16	32	22,977.40	60	0	39	81	1	25	23,002.64	59	76	20
17	12	51	12,045.27	35	53	93	82	2	25	23,010.25	59	77	26
18	12	52	12,044.29	35	78	61	83	3	25	23,041.54	60	0	24
19	13	51	23,063.85	60	3	45	84	4	25	22,519.73	74	79	52
20	13	52	23,037.78	60	0	76	85	1	26	22,959.54	59	71	50
21	13	53	23,039.38	60	0	95	86	2	26	22,949.86	59	69	42
22	13	54	23,019.19	59	77	50	87	3	26	22,648.92	71	73	41
23	13	55	23,052.64	60	1	40	88	4	26	22,882.79	62	64	05
24	13	56	23,033.68	59	78	91	89	9	35	23,040.16	60	2	42
25	14	57	23,030.90	59	79	03	90	10	35	23,049.08	60	4	39
26	fr. 12	53	12,044.27	36	22	67	91	11	35	23,049.30	60	3	25
27	fr. 12	54	12,038.03	35	58	04	92	9	36	23,041.12	60	4	45
28	fr. 12	55	12,033.21	35	53	93	93	10	36	23,074.51	60	5	99
29	fr. 12	56	12,044.91	36	1	96	94	11	36	23,079.44	60	7	94
30	fr. 12	57	12,029.42	36	14	17	95	9	37	23,062.93	60	6	53
31	13	57	23,028.13	59	78	62	96	10	37	23,056.37	60	6	31
32	15	57	23,015.19	59	77	66	97	11	37	23,086.67	60	8	68
33	16	57	22,959.90	61	0	77	98	9	38	23,067.03	60	6	45
34	fr. 12	58	12,049.07	36	19	34	99	10	38	23,068.06	60	5	70
35	13	58	23,018.38	59	77	65	100	11	38	23,095.83	60	9	69
36	14	58	23,004.41	59	75	05	101	9	39	23,041.10	60	2	04
37	15	58	22,962.61	59	69	52	102	10	39	23,049.49	60	0	29
38	16	58	22,927.91	60	65	45	103	11	39	23,086.97	60	9	75
39	fr. 12	59	6,467.94	20	69	47	104	9	40	23,053.01	60	4	70
40	fr. 13	59	5,380.72	13	56	51	105	10	40	23,099.73	60	7	80
41	fr. 14	59	5,356.14	14	35	02	106	11	40	23,092.13	60	7	77
42	fr. 15	59	5,393.23	14	49	41	107	11	41	23,072.24	60	25	99
43	fr. 16	59	5,385.51	14	34	60	108	1	27	23,091.36	60	5	39
44	9	29	23,037.80	60	3	98	109	2	27	23,066.52	60	1	77
45	9	30	23,055.85	60	4	88	Meanders			14	24	25	
46	9	31	23,015.31	59	77	88	110	3	27	22,493.73	59	59	39
47	9	32	22,996.55	59	76	65	111	4	27	22,874.16	60	36	12
48	9	33	22,998.09	59	76	42	112	1	28	23,042.07	59	79	00
49	10	33	23,003.68	59	78	87	113	2	28	22,968.33	59	74	12
50	11	33	22,984.06	59	68	38	Meanders			18	74	50	
51	9	34	22,967.10	59	71	21	114	3	28	22,455.55	59	75	83
52	10	34	22,990.16	59	78	09	115	4	28	22,853.94	60	18	00
53	11	34	23,074.27	60	4	00	116	29	9	23,014.34	59	77	67
54	25	11	23,024.29	60	4	94	117	30	9	23,009.48	59	77	25
55	26	11	22,993.98	59	75	64	118	31	9	22,995.99	59	77	98
56	27	11	23,061.78	60	5	47	119	29	10	23,041.35	60	4	88
57	28	11	22,864.69	60	56	67	120	30	10	22,964.94	59	72	99
58	25	12	23,085.58	60	4	30	121	31	10	22,944.23	59	71	76
59	26	12	23,067.20	60	2	64	122	29	11	23,052.34	60	1	74
60	27	12	23,009.08	59	79	29	123	30	11	23,024.32	59	77	08
61	28	12	22,775.49	60	45	89	124	31	11	23,011.77	59	77	31
62	25	13	23,008.92	59	77	60	Meanders			3	24	30	
63	26	13	22,975.61	59	73	35	125	32	11	22,469.80	59	32	96
64	27	13	22,984.38	59	74	73	126	33	11	1,905.80	3	57	82



E.—Statement showing the description of lands, area, and number of miles, &c.—Continued.

Number of township.	DESCRIP- TION.		Number of acres.	AMOUNT OF SURVEYS.			Number of township.	DESCRIP- TION.		Number of acres.	AMOUNT OF SURVEYS.		
	Township north.	Range west.		Miles.	Chains.	Links.		Township north.	Range west.		Miles.	Chains.	Links.
Meander s.....				3	58	00	131	33	12	6,822.96	6	54	40
127	29	12	23,042.89	60	0	31	Meander s.....				7	0	79
128	30	12	23,061.78	60	0	76	132	32	13	23,271.07	60	39	61
129	31	12	23,068.74	60	2	35	133	33	13	13,764.38	35	75	95
130	32	12	23,362.57	60	53	18	Meander s.....				6	76	90

E. E. CUNNINGHAM,

Surveyor General.

SURVEYOR GENERAL'S OFFICE,

Plattsmouth, September 25, 1872.

F.—Statement showing the description and number of township plats and descriptive lists furnished to the different land offices during the fiscal year ending June 30, 1872.

Township and range.*	When trans- mitted.	No. of plats.	No. of descrip- tive lists.
TO REGISTER DAKOTA LAND DISTRICT.			
Townships 27 and 28 north, ranges 1, 2, 3, 4, and 5 east; township 32 north, range 4 east; and townships 27 and 28 north, range 1 west.	Sept. 29, 1871	13	.....
Townships 29, 30, and 31, ranges 9 and 10; townships 25, 26, 27, 28, 29, 30, 31, 32, and 33, in ranges 11, 12, and 13; and townships 29 and 30, range 14.	April 22, 1872	35	70
TO REGISTER GRAND ISLAND LAND DISTRICT.			
Township 16, in ranges 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40, 41, and 42; townships 12 and 13, ranges 51, 52, 53, 54, 55, 56, 57, 58, and 59; townships 14, 15, and 16, ranges 57, 58, and 59.	April 12, 1872	43	86
Townships 17 and 18, range 14; townships 17, 18, and 19, in range 13.....	May 2 and Oct. 23, 1872.	5	.....
TO REGISTER SOUTH PLATTE LAND DISTRICT.			
Township 9, ranges 29, 30, 31, and 32; townships 9, 10, and 11, ranges 33 to 40, inclusive; and township 11, range 41.	March 28 and May 28, 1872.	29	58
TO REGISTER NEMAHA LAND DISTRICT.			
Townships 1 and 2, ranges 20 to 24, inclusive; townships 1 to 4, inclusive, ranges 25 to 28, inclusive.	April 15 and Jan. 10, 1872.	26	52
RECAPITULATION.			
To Nemaha land district.....		26	52
To South Platte land district.....		29	58
To Grand Island land district.....		48	86
To Dakota land district.....		48	70
Total.....		151	266

\* All north of base line and west of the sixth principal meridian.

E. E. CUNNINGHAM,

Surveyor General.

SURVEYOR GENERAL'S OFFICE,

Plattsmouth, Nebraska, September 25, 1872.



G.—*Estimate of sums required for the extension of public surveys in the State of Nebraska for the fiscal year ending June 31, 1874.*

All north of the base line and west of sixth principal meridian in Nebraska.	Miles.	Rate.	Amount.
STANDARD LINES.			
The third guide meridian from the first standard parallel to north boundary of the State.	24	\$15 00	\$360 00
EXTERIOR LINES.			
Townships 25 to 36, inclusive, in ranges 17 to 24, inclusive.....	} 1,560	10 00	15,600 00
Townships 17 to 20, inclusive, in ranges 25 to 40, inclusive.....			
SUBDIVISION LINES.			
Townships 21 to 36, inclusive, in ranges 17 to 24, inclusive.....	} 8,160	8 00	65,280 00
Townships 17 to 20, inclusive, in ranges 41 to 58, inclusive.....			
Total .....	9,744	.....	81,240 00

E. E. CUNNINGHAM,  
*Surveyor General Nebraska and Iowa.*

SURVEYOR GENERAL'S OFFICE,  
*Plattsmouth, Nebraska, September 25, 1872.*

H.—*Estimate of sums required for office expenses for fiscal year ending June 30, 1874.*

Salary of surveyor general.....	\$2,000
Salary of chief clerk.....	1,600
Salary of principal draughtsman.....	1,300
Salary of assistant draughtsman.....	1,300
Salary of accountant.....	1,200
Salary of three copyists, at \$1,100 each.....	3,300
Office rent, fuel, messenger, stationery, &c. ....	3,000
Total.....	13,700

E. E. CUNNINGHAM,  
*Surveyor General Nebraska and Iowa.*

SURVEYOR GENERAL'S OFFICE,  
*Plattsmouth, Nebraska, September 25, 1872.*

F.—*Report of the surveyor general of Kansas.*

SURVEYOR GENERAL'S OFFICE,  
*Lawrence, Kansas, September 24, 1872.*

SIR: In compliance with your instructions of April 5, 1872, I herewith present (in duplicate) my annual report of the surveying operations, together with a map showing the progress of the surveys, in this district during the fiscal year ending June 30, 1872.

FIELD WORK.

All surveys contracted for out of the appropriation of March 3, 1871, have been completed.

Out of special deposits made by railroad companies in compliance with an act approved July 2, 1864, the lines of public surveys have been extended over townships 16, 17, 18, 19, and 20 south, ranges 31, 32, and 33 west.

The "Cherokee national strip" has been surveyed in accordance with your instructions of April 28, 1871.

Five joint contracts have been entered into out of the appropriation of June 10, 1872, for the extension of the lines of public surveys in the State of Kansas. In letting these contracts, I have been guided by existing laws and regulations governing the surveying service. The demands of settlers and other public interests have been duly considered in the selection of the localities to be surveyed.



## OFFICE WORK.

During the fiscal year ending June 30, 1872, the field notes of 88 miles standard, 1,118 miles of exterior township, and 7,646 miles of subdivisional lines have been transcribed and transmitted to the Department.

Ten diagrams, in duplicate, of standard and exterior lines, and plats, in triplicate, of 136 townships, were prepared, and the required copies transmitted to the General Land Office and the proper local land offices.

One hundred and thirty-six descriptive lists of the surveys executed during the year ending June 30, 1872, have been prepared and forwarded to the respective local land offices.

The plats and field notes of the survey of the "Cherokee national strip," as transmitted to this office by the deputy surveyor, have been examined and the areas recalculated, and the required copies transmitted to the Department and the respective local land offices.

In connection with the above, the usual amount of miscellaneous business has been attended to, of which no detailed statement can well be given.

## EXTENSION OF PUBLIC SURVEYS.

The usual estimates for the surveying service in my district, for the fiscal year ending June 30, 1874, have been prepared and transmitted to your Department, as directed in your circular of April 5, 1872.

The surveys of the State of Kansas are rapidly approaching completion. The sum of \$150,000 is sufficient to extend the lines of survey over the remaining unsurveyed public domain. In my estimates I ask for an appropriation of \$70,000 to meet the necessary demands of a constantly increasing immigration, and the requirements of the railway lines, now pushing forward to Colorado and New Mexico.

In conclusion, I respectfully invite your attention to the accompanying tabular statements which form a part of this report:

A. Names, duties, and salaries of persons employed in the surveyor general's office during the year ending June 30, 1872.

B. Sums expended for salaries of surveyor general and clerks during the year ending June 30, 1872.

C. Expenditures of the office during the fiscal year ending June 30, 1872.

D. The extent and cost of public surveys executed during the year ending June 30, 1872.

E. The extent and cost of surveying the "Cherokee national strip," in Kansas.

F. Amounts deposited by railroad companies in compliance with an act approved July 2, 1864, and the decision of the Secretary of the Interior of November 8, 1865.

G. Numbers and area of townships, plats and transcript of field notes of which have been transmitted to the Department, and plats and descriptive lists furnished the local land-offices at Salina and Wichita, during the fiscal year ending June 30, 1872.

H. Numbers and area of townships of the "Cherokee national strip," plats and transcript of field notes of which have been transmitted to the Department, and plats transmitted to the local land offices at Independence and Wichita.

I. Estimated expense, number of miles, and character of work for which contracts have been entered into, and chargeable to the appropriation of June 10, 1872.

J. Estimate of sums required for the extension of surveys during the fiscal year ending June 30, 1874.

K. Estimate of sum required for office expenses for the fiscal year ending June 30, 1874.

I am, very respectfully, your obedient servant,

C. W. BABCOCK,  
Surveyor General.

Hon. WILLIS DRUMMOND,  
Commissioner General Land Office, Washington, D. C.



A.—Statement showing the names, duties, nativity, whence appointed, and rate of compensation per annum of persons employed in the surveyor general's office of Kansas during the fiscal year ending June 30, 1872.

Name.	Duty.	Nativity.	Whence appointed.
C. W. Babcock .....	Surveyor general .....	Vermont .....	Kansas .....
H. C. F. Hackbusch .....	Chief clerk .....	Prussia .....	do .....
William B. Covell* .....	Principal draughtsman .....	New York .....	do .....
T. H. Morrison .....	Assistant draughtsman .....	Maine .....	do .....
Austin R. Mills† .....	Accountant .....	Massachusetts .....	do .....
S. A. Gillette .....	Copyist .....	Ohio .....	do .....
John Barber .....	do .....	do .....	do .....
Henry B. Ray .....	do .....	Virginia .....	do .....
John T. Athey .....	do .....	Maryland .....	do .....
James Bicknell .....	Messenger .....	England .....	do .....
Term of service.			Salary per annum.
C. W. Babcock .....	Entire year .....		\$2,000 00
H. C. F. Hackbusch .....	do .....		1,600 00
William B. Covell* .....	From July 1 to August 31, 1871, and April 8 to June 30, 1872.		1,300 00
T. H. Morrison .....	Entire year .....		1,100 00
Austin R. Mills† .....	do .....		1,200 00
S. A. Gillette .....	do .....		1,100 00
John Barber .....	From July 1 to August 31, 1871, and November 15, 1871, to February 29, 1872.		1,100 00
Henry B. Ray .....	From October 1, 1871, to March 4, 1872 .....		1,100 00
John T. Athey .....	From October 1, 1871, to February 29, 1872 .....		1,100 00
James Bicknell .....	Entire year .....		600 00

\* From April 8 to June 30, 1872; paid out of special deposits.

† From April 1 to June 30, 1872; paid out of special deposits.

B.—Statement showing the amount expended for salary of surveyor general and clerks during the fiscal year ending June 30, 1872.

	Regular service.	Out of special deposits.	Total.
Quarter ending September 30, 1871 .....	\$2,154 34	.....	\$2,154 34
Quarter ending December 31, 1871 .....	2,440 48	.....	2,440 48
Quarter ending March 31, 1872 .....	2,306 02	.....	2,306 02
Quarter ending June 30, 1872 .....	1,450 00	\$600 00	2,050 00
Total .....	8,350 84	600 00	8,950 84

C.—Statement showing the amount expended for rent of office and incidental expenses during the fiscal year ending June 30, 1872.

Quarter ending September 30, 1871 .....	\$427 06
Quarter ending December 31, 1871 .....	492 30
Quarter ending March 31, 1872 .....	408 75
Quarter ending June 30, 1872 .....	564 78
Total .....	1,892 89

#### Recapitulation.

Salaries of surveyor general and clerks during the year .....	\$8,950 84
Rent of office and incidental expenses during the year .....	1,892 89
Total .....	10,843 73



D.—Statement showing the extent and cost of surveys executed in Kansas during the fiscal year ending June 30, 1872, payable out of appropriation for public surveys approved March 3, 1871.

Number of contract.	Name of deputy.	Standard lines.	Township lines.	Section lines.	Date of appropriation.	Date of contract.	Rate per mile.	Amount for mileage.	Total of contract.
		<i>Miles chs. lks.</i>	<i>Miles chs. lks.</i>	<i>Miles chs. lks.</i>					
358	Wilcox and Thomas.....		246 7 71		Mar. 3, 1871	June 5, 1871	\$6 00	\$1,476 57	\$10,239 22
358	Wilcox and Thomas.....			1,752 42 60	Mar. 3, 1871	June 5, 1871	5 00	8,762 65	
359	Armstrong, Burwell and Urton.....	88 47 69			Mar. 3, 1871	June 6, 1871	10 00	885 96	16,037 41
359	Armstrong, Burwell and Urton.....		578 60 90		Mar. 3, 1871	June 6, 1871	6 00	3,472 57	
359	Armstrong, Burwell and Urton.....			2,335 62 27	Mar. 3, 1871	June 6, 1871	5 00	11,678 88	
360	McClure, Cosgray and Armstrong.....		161 75 07		Mar. 3, 1871	June 6, 1871	6 00	971 63	14,266 47
360	McClure, Cosgray and Armstrong.....			2,658 77 67	Mar. 3, 1871	June 6, 1871	5 00	13,294 84	
	Total.....	88 47 69	986 63 68	6,747 22 54				40,543 10	40,543 10

Statement showing the extent and cost of surveys executed in Kansas during the fiscal year ending June 30, 1872, payable out of special deposits made by railroad companies, in compliance with act of July 2, 1864.

Number of contract.	Name of deputy.	Township lines.	Section lines.	Date of contract.	Rate per mile.	Amount for mileage.	Total of contract.
		<i>Miles chs. lks.</i>	<i>Miles chs. lks.</i>				
361	McClure, Cosgray and Armstrong.....	132 0 23		Oct. 18, 1871	\$6 00	\$792 02	\$5,291 16
361	McClure, Cosgray and Armstrong.....		899 66 31	Oct. 18, 1871	5 00	4,499 14	
	Total.....	132 0 23	899 66 31			5,291 16	5,291 16



E.—Statement showing the extent and cost of surveying the "Cherokee national strip" in Kansas, payable out of the proceeds of the sale of the lands.

No. of contract.	Name of deputy.	Township and standard lines and out-boundaries.	Section lines.	Date of contract.	Rate per mile.	Amount of mileage.	Transcribing field notes and making diagrams and plats.	Total of contract.
357	William B. Covel..	Miles chs. lks. 303 62 62	Miles chs. lks. 1,197 3 49	1871. May 29	\$10 00	\$3,037 82	} \$736 80	\$13,350 97
357	do .....	.....	.....	May 29	8 00	9,576 35		
	Total.....	303 62 62	1,197 3 49	.....	.....	12,614 17	736 80	13,350 97

F.—Statement showing the amount deposited by railroad companies, in compliance with an act approved July 2, 1864, and the decision of the Secretary of the Interior of November 8, 1866.

Name of company.	Date of deposit.	For surveys.	For office work.	Total amount deposited.
Kansas Pacific Railway.....	Oct. 5, 1871	\$109 00	\$60 00	\$169 00

G.—Statement showing the description of lands and area of same for which duplicate plats and transcript of field notes have been transmitted to the Department, and triplicate plats and descriptive lists have been furnished the local land office, during the fiscal year ending June 30, 1872.

AT WICHITA, KANSAS.

Township south.	Range west.	Area, (acres.)	Plats and field notes, when transmitted.	Descriptive lists, when transmitted.	Township south.	Range west.	Area, (acres.)	Plats and field notes, when transmitted.	Descriptive lists, when transmitted.
21	9	21,768.80	Jan. 17, 1872	Apr. 16, 1872	24	15	22,977.85	Dec. 26, 1871	Apr. 16, 1872
26	9	16,697.00	Jan. 17, 1872	Apr. 16, 1872	25	15	23,020.48	Dec. 26, 1871	Apr. 16, 1872
21	10	22,355.28	Jan. 17, 1872	Apr. 16, 1872	26	15	16,720.94	Dec. 26, 1871	Apr. 16, 1872
22	10	22,946.98	Jan. 17, 1872	Apr. 16, 1872	21	16	22,437.78	Dec. 26, 1871	Apr. 16, 1872
23	10	22,959.13	Jan. 17, 1872	Apr. 16, 1872	22	16	22,135.30	Dec. 26, 1871	Apr. 16, 1872
24	10	23,000.89	Jan. 17, 1872	Apr. 16, 1872	23	16	23,007.30	Dec. 26, 1871	Apr. 16, 1872
25	10	23,024.40	Jan. 17, 1872	Apr. 16, 1872	24	16	23,075.15	Dec. 26, 1871	Apr. 16, 1872
26	10	16,660.47	Jan. 17, 1872	Apr. 16, 1872	25	16	23,051.07	Dec. 26, 1871	Apr. 16, 1872
21	11	23,051.62	Jan. 17, 1872	Apr. 16, 1872	26	16	16,656.45	Dec. 26, 1871	Apr. 16, 1872
22	11	22,995.78	Jan. 17, 1872	Apr. 16, 1872	21	17	17,548.69	Dec. 26, 1871	Apr. 16, 1872
23	11	22,998.59	Jan. 17, 1872	Apr. 16, 1872	22	17	19,035.36	Dec. 26, 1871	Apr. 16, 1872
24	11	23,003.79	Jan. 17, 1872	Apr. 16, 1872	23	17	22,291.99	Dec. 26, 1871	Apr. 16, 1872
25	11	23,032.50	Jan. 17, 1872	Apr. 16, 1872	24	17	22,838.16	Dec. 26, 1871	Apr. 16, 1872
26	11	16,569.10	Jan. 17, 1872	Apr. 16, 1872	25	17	22,839.85	Dec. 26, 1871	Apr. 16, 1872
21	12	22,966.98	Jan. 17, 1872	Apr. 16, 1872	26	17	16,673.18	Dec. 26, 1871	Apr. 16, 1872
22	12	22,940.08	Jan. 17, 1872	Apr. 16, 1872	21	18	21,454.21	Dec. 26, 1871	Apr. 16, 1872
23	12	22,994.10	Jan. 17, 1872	Apr. 16, 1872	22	18	22,175.63	Dec. 26, 1871	Apr. 16, 1872
24	12	23,017.12	Jan. 17, 1872	Apr. 16, 1872	23	18	21,750.51	Dec. 26, 1871	Apr. 16, 1872
25	12	23,032.08	Jan. 17, 1872	Apr. 16, 1872	24	18	22,367.14	Dec. 26, 1871	Apr. 16, 1872
26	12	16,531.08	Jan. 17, 1872	Apr. 16, 1872	25	18	23,051.68	Dec. 26, 1871	Apr. 16, 1872
21	13	22,891.65	Jan. 17, 1872	Apr. 16, 1872	26	18	16,565.51	Dec. 26, 1871	Apr. 16, 1872
22	13	22,967.52	Jan. 17, 1872	Apr. 16, 1872	21	19	22,859.07	Dec. 26, 1871	Apr. 16, 1872
23	13	23,015.60	Jan. 17, 1872	Apr. 16, 1872	22	19	22,913.60	Dec. 26, 1871	Apr. 16, 1872
24	13	23,032.57	Jan. 17, 1872	Apr. 16, 1872	23	19	22,933.21	Dec. 26, 1871	Apr. 16, 1872
25	13	23,027.92	Jan. 17, 1872	Apr. 16, 1872	24	19	22,287.14	Dec. 26, 1871	Apr. 16, 1872
26	13	16,571.59	Jan. 17, 1872	Apr. 16, 1872	25	19	21,984.82	Dec. 26, 1871	Apr. 16, 1872
21	14	22,826.55	Dec. 26, 1871	Apr. 16, 1872	26	19	16,538.75	Dec. 26, 1871	Apr. 16, 1872
22	14	23,005.88	Dec. 26, 1871	Apr. 16, 1872	21	20	22,872.81	Feb. 12, 1872	Apr. 16, 1872
23	14	23,044.80	Dec. 26, 1871	Apr. 16, 1872	22	20	22,937.31	Feb. 12, 1872	Apr. 16, 1872
24	14	23,021.76	Dec. 26, 1871	Apr. 16, 1872	23	20	22,971.31	Feb. 12, 1872	Apr. 16, 1872
25	14	23,029.36	Dec. 26, 1871	Apr. 16, 1872	24	20	23,011.26	Feb. 12, 1872	Apr. 16, 1872
26	14	16,674.46	Dec. 26, 1871	Apr. 16, 1872	25	20	22,815.52	Feb. 12, 1872	Apr. 16, 1872
21	15	21,632.86	Dec. 26, 1871	Apr. 16, 1872	26	20	15,619.29	Dec. 26, 1871	Apr. 16, 1872
22	15	22,894.23	Dec. 26, 1871	Apr. 16, 1872	21	21	22,888.10	Feb. 12, 1872	Apr. 16, 1872
23	15	22,945.03	Dec. 26, 1871	Apr. 16, 1872	22	21	22,943.18	Feb. 12, 1872	Apr. 16, 1872



G.—Statement showing the description of lands and area of same, &amp;c.—Continued.

## AT WICHITA, KANSAS—Continued.

Township south.	Range west.	Area, (acres.)	Plats and field notes, when transmitted.	Descriptive lists, when trans- mitted.	Township south.	Range west.	Area, (acres.)	Plats and field notes, when transmitted.	Descriptive lists, when trans- mitted.
23	21	22, 975. 05	Feb. 12, 1872	Apr. 16, 1872	23	23	22, 965. 10	Feb. 12, 1872	Apr. 16, 1872
24	21	23, 003. 52	Feb. 12, 1872	Apr. 16, 1872	24	23	23, 025. 28	Feb. 12, 1872	Apr. 16, 1872
25	21	23, 020. 08	Feb. 12, 1872	Apr. 16, 1872	25	23	18, 237. 51	Feb. 12, 1872	Apr. 16, 1872
26	21	16, 593. 52	Dec. 26, 1871	Apr. 16, 1872	26	23	15, 060. 13	Dec. 26, 1871	Apr. 16, 1872
21	22	22, 877. 75	Feb. 12, 1872	Apr. 16, 1872	21	24	22, 913. 13	Feb. 12, 1872	Apr. 16, 1872
22	22	22, 927. 16	Feb. 12, 1872	Apr. 16, 1872	22	24	23, 020. 04	Feb. 12, 1872	Apr. 16, 1872
23	22	23, 049. 56	Feb. 12, 1872	Apr. 16, 1872	23	24	23, 019. 23	Feb. 12, 1872	Apr. 16, 1872
24	22	23, 151. 53	Feb. 12, 1872	Apr. 16, 1872	24	24	22, 980. 38	Feb. 12, 1872	Apr. 16, 1872
25	22	23, 127. 00	Feb. 12, 1872	Apr. 16, 1872	25	24	9, 768. 45	Feb. 12, 1872	Apr. 16, 1872
26	22	16, 704. 23	Dec. 26, 1871	Apr. 16, 1872	26	24	4, 921. 83	Dec. 26, 1871	Apr. 16, 1872
21	23	22, 914. 49	Feb. 12, 1872	Apr. 16, 1872					
22	23	22, 991. 39	Feb. 12, 1872	Apr. 16, 1872			1, 959, 623. 51		

## AT SALINA, KANSAS.

16	27	23, 057. 45	Feb. 12, 1872	Apr. 16, 1872	19	31	22, 933. 52	Feb. 22, 1872	Apr. 16, 1872
17	27	22, 885. 05	Feb. 12, 1872	Apr. 16, 1872	20	31	23, 012. 48	Feb. 22, 1872	Apr. 16, 1872
18	27	22, 923. 95	Feb. 12, 1872	Apr. 16, 1872	16	32	22, 884. 68	Feb. 22, 1872	Apr. 16, 1872
19	27	22, 929. 97	Feb. 12, 1872	Apr. 16, 1872	17	32	22, 940. 38	Feb. 22, 1872	Apr. 16, 1872
20	27	23, 062. 57	Feb. 12, 1872	Apr. 16, 1872	18	32	22, 985. 19	Feb. 22, 1872	Apr. 16, 1872
16	28	23, 072. 87	Feb. 12, 1872	Apr. 16, 1872	19	32	22, 980. 08	Feb. 22, 1872	Apr. 16, 1872
17	28	22, 942. 32	Feb. 12, 1872	Apr. 16, 1872	20	32	23, 028. 27	Feb. 22, 1872	Apr. 16, 1872
18	28	22, 934. 24	Feb. 12, 1872	Apr. 16, 1872	16	33	22, 920. 68	Feb. 22, 1872	Apr. 16, 1872
19	28	22, 990. 64	Feb. 12, 1872	Apr. 16, 1872	17	33	22, 933. 23	Feb. 22, 1872	Apr. 16, 1872
20	28	23, 038. 08	Feb. 12, 1872	Apr. 16, 1872	18	33	22, 931. 84	Feb. 22, 1872	Apr. 16, 1872
16	29	22, 956. 44	Feb. 12, 1872	Apr. 16, 1872	19	33	22, 987. 53	Feb. 22, 1872	Apr. 16, 1872
17	29	22, 898. 15	Feb. 12, 1872	Apr. 16, 1872	20	33	23, 014. 01	Feb. 22, 1872	Apr. 16, 1872
18	29	22, 884. 73	Feb. 12, 1872	Apr. 16, 1872	19	12	976. 52	Jan. 27, 1872	Apr. 16, 1872
19	29	22, 962. 33	Feb. 12, 1872	Apr. 16, 1872	19	13	2, 271. 08	Jan. 27, 1872	Apr. 16, 1872
20	29	23, 021. 86	Feb. 12, 1872	Apr. 16, 1872	20	10	2, 559. 34	Jan. 17, 1872	Apr. 16, 1872
16	30	22, 945. 94	Feb. 12, 1872	Apr. 16, 1872	20	11	17, 486. 86	Jan. 17, 1872	Apr. 16, 1872
17	30	22, 926. 84	Feb. 12, 1872	Apr. 16, 1872	19	12	452. 67	Jan. 17, 1872	Apr. 16, 1872
18	30	22, 939. 02	Feb. 12, 1872	Apr. 16, 1872	20	12	22, 532. 19	Jan. 17, 1872	Apr. 16, 1872
19	30	22, 968. 48	Feb. 12, 1872	Apr. 16, 1872	19	13	399. 15	Jan. 17, 1872	Apr. 16, 1872
20	30	23, 019. 28	Feb. 12, 1872	Apr. 16, 1872	20	13	22, 096. 04	Jan. 17, 1872	Apr. 16, 1872
16	31	22, 795. 23	Feb. 22, 1872	Apr. 16, 1872	20	14	10, 396. 56	Jan. 17, 1872	Apr. 16, 1872
17	31	22, 902. 15	Feb. 22, 1872	Apr. 16, 1872					
18	31	22, 912. 73	Feb. 22, 1872	Apr. 16, 1872			882, 692. 67		

H.—Statement showing description of lands and area of same of the "Cherokee national strip," for which approved plats and transcript of field notes have been forwarded to the Department, and approved plats have been transmitted to the local land office.

## AT INDEPENDENCE, KANSAS.

Fractional town- ship south.	Range east.	Area, (acres.)	Plats and field notes, when trans- mitted.	Fractional town- ship south.	Range east.	Area, (acres.)	Plats and field notes, when trans- mitted.
35	9	9, 948. 65	May 8, 1872.	35	17	9, 084. 26	May 8, 1872.
35	10	9, 828. 90	May 8, 1872.	35	18	8, 505. 77	May 8, 1872.
35	11	9, 607. 08	May 8, 1872.	35	19	8, 385. 48	May 8, 1872.
35	12	9, 399. 08	May 8, 1872.	35	20	8, 352. 00	May 8, 1872.
35	13	9, 295. 59	May 8, 1872.	35	21	7, 701. 22	May 8, 1872.
35	14	9, 135. 42	May 8, 1872.	35	22	456. 71	May 8, 1872.
35	15	8, 966. 70	May 8, 1872.				
35	16	8, 730. 69	May 8, 1872.			117, 397. 55	



H.—Statement showing description of lands of the “Cherokee national strip,” &c.—Continued.  
AT WICHITA, KANSAS.

Fractional town- ship south.	Range.	Area, (acres.)	Plats and field notes, when transmitted.	Fractional town- ship south.	Range.	Area, (acres.)	Plats and field notes, when transmitted.
35	1 east ..	10, 535. 10	May 8, 1872.	35	11 west..	9, 431. 27	June 5, 1872.
35	2 east ..	10, 337. 53	May 8, 1872.	35	12 west..	9, 237. 01	June 5, 1872.
35	3 east ..	10, 217. 70	May 8, 1872.	35	13 west..	9, 164. 39	June 5, 1872.
35	4 east ..	9, 695. 22	May 8, 1872.	35	14 west..	9, 042. 23	June 5, 1872.
35	5 east ..	9, 947. 58	May 8, 1872.	35	15 west..	9, 026. 05	June 5, 1872.
35	6 east ..	10, 036. 53	May 8, 1872.	35	16 west..	8, 999. 07	June 5, 1872.
35	7 east ..	9, 926. 01	May 8, 1872.	35	17 west..	8, 898. 74	June 5, 1872.
35	8 east ..	12, 649. 92	May 8, 1872.	35	18 west..	8, 777. 08	June 5, 1872.
35	1 west..	10, 540. 40	June 5, 1872.	35	19 west..	8, 680. 74	June 5, 1872.
35	2 west..	10, 331. 56	June 5, 1872.	35	20 west..	8, 493. 72	June 5, 1872.
35	3 west..	10, 372. 68	June 5, 1872.	35	21 west..	8, 319. 70	June 5, 1872.
35	4 west..	10, 404. 32	June 5, 1872.	35	22 west..	8, 025. 25	June 5, 1872.
35	5 west..	10, 262. 12	June 5, 1872.	35	23 west..	7, 961. 65	June 5, 1872.
35	6 west..	10, 072. 12	June 5, 1872.	35	24 west..	8, 298. 64	June 5, 1872.
35	7 west..	10, 055. 37	June 5, 1872.	35	25 west..	8, 562. 19	June 5, 1872.
35	8 west..	9, 947. 53	June 5, 1872.	35	26 west..	1, 460. 28	June 5, 1872.
35	9 west..	9, 860. 23	June 5, 1873.				
35	10 west..	9, 711. 88	June 5, 1872.			317, 281. 81	

I.—Statement showing the estimated expense, number of miles, and character of work for which contracts have been entered into for surveying in Kansas, and chargeable to appropriation for such surveys, approved June 10, 1872.

No. of con- tract.	Name of deputy.	Standard lines.	Township lines.	Section lines.	Rate per mile.	Estimated cost.
		Miles.	Miles.	Miles.		
362	Wilder & Diefendorf .....	24			\$10	\$240 00
362	.....do .....		221		7	1, 547 00
362	.....do .....			1, 140	6	6, 840 00
363	Armstrong, Burwell & Urton .....	78			10	780 00
363	.....do .....		402		7	2, 814 00
363	.....do .....			2, 430	6	14, 580 00
364	Wilcox & Thomas .....		252		7	1, 764 00
364	.....do .....			1, 380	6	8, 280 00
365	Sternbergh, Thompson & Mills .....		340		7	2, 380 00
365	.....do .....			2, 060	6	12, 360 00
366	Haekbusch, McClure & Cosgray .....	78			10	780 00
366	.....do .....		402		7	2, 814 00
366	.....do .....			2, 450	6	14, 700 00
	Total .....	180	1, 617	9, 460	-----	69, 879 00

J.—Estimate of the sums required for the extension of surveys in the State of Kansas for the fiscal year ending June 30, 1874.

Surveys estimated.	Miles.	Rate.	Cost.
The 4th and 5th guide meridians, between the 5th and 6th standard paral- lels south .....	60	\$10	\$600
The 1st, 2d, 3d, 4th, and 5th standard parallels south from the 5th guide meri- dian west to the west boundary of the State, and the 6th standard paral- lel south from the west line of range 29 west to the west boundary of the State; in all .....	120	10	1, 200
The exterior lines of townships 1, 2, and 3 south, range 36 west, of town- ships 1, 2, 3, 4, and 5 south, ranges 37 to 40 west, inclusive; townships 16, 17, 18, 19, and 20 south, of ranges 34 to 40 west, inclusive; townships 26, 27, 28, 29, and 30 south, of ranges 30 to 40 west, inclusive; also the exterior lines of all townships lying between the base line and the 6th standard parallel south, and the 5th guide meridian west and the west boundary of Kansas; in all .....	1, 480	7	10, 360
The subdivisional lines in all the aforesaid townships and townships 29 and 30 south, of range 29 west; in all .....	9, 620	6	57, 720
Total .....			69, 880



K.—*Estimate of sums required for office expenses for the fiscal year ending June 30, 1874.*

Salary of surveyor general.....	\$2,000 00
Salary of chief clerk.....	1,600 00
Salary of principal draughtsman.....	1,300 00
Salary of assistant draughtsman.....	1,200 00
Salary of accountant.....	1,200 00
Salary of two copyists, at \$1,100 each.....	2,200 00
Messenger, rent, and other incidental expenses.....	2,000 00
Total.....	<u>11,500 00</u>

G.—*Report of the surveyor general of New Mexico.*

SURVEYOR GENERAL'S OFFICE,  
Santa Fé, New Mexico, October 7, 1872.

SIR: In compliance with the instructions of your letter of the 5th of April last, to the surveyor general, I have the honor to transmit the annual report of the operations of this office for the year ending June 30, 1872.

On account of the very short time I have been in the practical discharge of my official duties at this city, having reached my post here and entered upon them but a few days ago, and being as yet but very imperfectly advised of the character and requirements of the surveying service in this district, my report will be confined mainly to a statement of the operations of the office during the year, as shown by its records. It will embrace, however, such recommendations as, notwithstanding my short official residence here, and as yet limited observations, I shall feel called upon to urge; leaving to the future and a more extended acquaintance with the country, its capabilities and needs, and to occasion as it may suggest or require, the amplification of my views and reflections upon the various matters properly the subject of the surveyor general's annual report.

When the late surveyor general died, in the month of June last, the appropriation made by Congress for public surveys for the last fiscal year, had been all applied in contracts made by him with deputy surveyors, and the work in the field, under the contracts, had all been completed and returned, as had also been the field work, contracted for by him, of certain public lands and confirmed private claims, to be paid for out of special deposits of funds made for the purpose. Of the work provided for in these deposits, both the field and office work of only the Silver City town site remain to be executed, no contract for the survey of the site having then or yet been made; and only the office work of the subdivision of townships two and three north, of range twenty-six east, and of the survey of exterior lines connected therewith, remains to be finished and reported to the General Land Office, all of which will appear from the tabular statements accompanying this report.

## PUBLIC LANDS.

Congress, hitherto, has not deemed urgent the rapid prosecution of the public land surveys in New Mexico, as there has never been any great demand for land by settlers. Unlike most of the land States and Territories, except, perhaps, California, and, to a small extent, Arizona and Colorado, there existed here inside the settled sections large private grants of land, derived from the former governments of the country, and settlers could usually obtain by purchase, inside these tracts, the land they needed for cultivation, or, as sometimes allowed by the terms of community grants, acquire it by simply settling upon and cultivating it. From time immemorial, the extension of the settled frontier, in any direction, was impeded by the proximity and hostility of powerful tribes and bands of savage Indians. But now the old grants are being occupied to their capacity, or in consequence of the prospective large immigration, attracted by the advent of railroads, and the probable discovery and development of mines and placers, have enhanced in value to such an extent as often to prevent the settler from acquiring a homestead within them by purchase, and as to prompt him to avail himself of the pre-emption or homestead laws of the United States, by settling at once upon the public domain; and the chief impediment to immigration and settlement outside the frontier (depredations upon life and property by the savages) has now been nearly stopped, or is in course of a speedy and entire removal under the present Indian policy of the Government, so that now settlers and settlements may spread out over the Territory, and in peace and security mark the march of empire across the continent.



It appears to me that considerable sums of money have been used for public surveys, and especially some years since, in an injudicious manner. For the want of proper information, which is now much more easily obtainable, much land was surveyed which, not being so situated as to be easily irrigated, or not being located upon or near lines of travel and communication, was not likely to be sought for under the pre-emption or homestead laws, or for purchase by early settlers in this Territory. For these reasons, in addition to others already noted, the sales of land in this district, so far as offered, have been very small. I confidently believe that surveys can be prosecuted so that the lands will sell, and I intend to exert myself to remove many false impressions and injurious prejudices which exist throughout the country in regard to this district, its lands and latent resources. It is also a fact that the lands which were offered for sale in 1870 were selected by a former Commissioner of the General Land Office, without consultation with or advice from my predecessor, who could, without doubt, have indicated lands to be offered which would have been much more salable. As it is, but one offer of lands has been made in this district, and many of these were the most undesirable that had been surveyed.

In view and consideration of the approach of the land grant railroads, and of the prospective demand by settlers for surveyed lands, it seems to me that the true policy of the Government is to survey the whole Territory as rapidly as practicable, since sooner or later it must be done in pursuance of the public land system and policy of the United States, as has been done in the States of Illinois, Wisconsin, and others now completed. There are now projected five great railways pointing to New Mexico, some of them in actual course of construction, and others, it is confidently stated, soon to be commenced, viz, the Texas Pacific; the Atlantic and Pacific, or Thirty-fifth Parallel; the Atchison, Topeka and Santa Fé; the Denver and Rio Grande; and the New Mexico and Gulf. The two first named have each of them munificent land grants in New Mexico, and as they reach and traverse the regions embracing their immense proprietary landed rights they will require, and the settlers along the routes will demand, that all the valid prior grants be ascertained and surveyed, and the public lands be sectionized, so that it may be known what portions belong to grant owners, what portions to the corporations, and what portions are available for immediate settlement.

The area of 121,201 square miles in New Mexico embraces—

In acres .....	77, 568, 640. 00
Of which military reserves surveyed .....	189, 493. 44
Indian reserves surveyed .....	1, 302, 960. 00
Confirmed private grants surveyed .....	3, 860, 582. 73
Mining claims surveyed .....	51. 87
Townships subdivided .....	3, 248, 463. 09
	<hr/> 8, 601, 551. 13
Leaving acres unsurveyed .....	<hr/> 68, 967, 088. 87

Toward the consummation in considerable measure of this large remaining work, I have estimated for an appropriation by Congress of \$314,806 for the next fiscal year. Although the estimate is larger, I believe, than any of my predecessors has submitted for the purpose, I think the amount is reasonable and proper, now that the occasion has arrived for an extensive and rapid prosecution of the survey of the national domain in New Mexico, for the reasons above given, and as the consummation of the work is clearly contemplated, in its fifth and sixth sections, by the act of Congress of July 22, 1854, creating the office of surveyor general for this Territory.

#### PRIVATE LAND CLAIMS.

I find from the records that the surveyor general during the year ending the 30th of June last, acted upon and decided the following private land claims, brought before him for adjudication, under the act of Congress of July 22, 1854:

- No. 52. Roque Lovato, approved July 8, 1871.
- No. 53. Lorenzo Marquez, approved July 12, 1871.
- No. 54. Bernardino de Sena *et al.*, approved November 15, 1871.
- No. 55. Juan Bautista Valdez, deceased, approved November 16, 1871.
- No. 56. Juan de Dios Peña *et al.*, approved November 25, 1871.
- No. 57. Francisco Baca y Terrus *et al.*, approved November 25, 1871.
- No. 58. José Mirabal *et al.*, approved January 15, 1872.
- No. 59. José M. de la Peña *et al.*, approved January 31, 1872.
- No. 60. Town of Galisteo, rejected February 24, 1872.
- No. 61. Juan Carlos Sautistevan *et al.*, approved March 23, 1872.
- No. 62. Town of Cieneguilla, approved June 13, 1872.

The transcript in each of these cases, except No. 62, has been forwarded to the General Land Office for transmission to Congress. Sundry other claims are ready for a hearing, and as the parties interested are anxious to have the cases acted upon, I



shall, as soon as practicable, hear, decide, and transmit as many of them as may be finally actionable before the surveyor general.

Congress having hitherto omitted to impose upon the holders of claims to lands in this Territory, originating under the former sovereigns of the soil, any obligation to present their titles for investigation and recognition, comparatively few claims have been filed in this office, and the majority of these were presented soon after the opening of the office for their reception, in 1855, under the organic law of 1854. This law leaves it entirely to the option of holders to file or decline to file their claims. It is believed that a law requiring claimants holding under alleged Spanish or Mexican grants to file their title-papers within a prescribed period, say before July 4, 1876, with the stipulation that all claims under such grants not so filed shall be deemed to have been abandoned and forfeited, would have the very important effect of inducing claimants to produce and file their muniments at once and of collecting on deposit here, as contemplated by the statutes, all these now unregistered claims against the public domain in this Territory. The Government in deciding upon the validity of these grants always appears to have been actuated by the most liberal principles, as evidenced both in the legislation of Congress and in the decisions of the Supreme Court concerning them. If the grants were incipient and inchoate at the date of the change of national sovereignty, under the treaty of Guadalupe Hidalgo, or if acquired in good faith, though imperfect in form, or defective in requisites not absolutely essential, they are recognized and confirmed. The claimant, therefore, under one of these old grants, though he hold in good faith but the color of title, may rely with confidence upon the Government for an equitable and generous consideration of his claim. At the same time, however, due regard and care for the rights and interests of the Government must be observed by protecting it against invalid and fraudulent claims, so far as possible, and in regard to the manner of the adjudication of these cases before the surveyor general, the law appears to be very defective. It should provide, I think, that subpoenas may be issued for witnesses, served by the marshal, attendance of witnesses compelled, and such fees allowed for these services and making up the record as are allowed to officers of the Federal courts for similar services. It should also be made the duty of the district attorney to attend and protect the interests of the United States. All this should be done that justice may be arrived at. As the practice has been, the proceedings are *ex parte*. Manifestly the surveyor general ought not to be required or expected to act as counsel for either side and then decide the issue.

From present prospects a great deal of this kind of investigation may be expected in the near future, and if the United States district attorney be required to appear for the Government, extra compensation should be provided for this service.

It is believed that nearly all those portions of this Territory which were settled when the United States came in possession, principally in the valleys of the larger streams, are covered by old Spanish and Mexican grants, as yet unascertained, and if they be not produced, and if the public surveys be prosecuted, nevertheless, with due activity, these, to a great extent, must necessarily run over large bodies of land held under unknown subsisting titles. The existence, at least, of these grants might be known to the surveyor general; were there a record of the grants made by the former governments accessible; but, unfortunately, no such register seems extant, and the only evidence to support or discredit any alleged grant, or any claim for land, is the evidence afforded by the muniment itself, by incidental proof found among the mass of old archives here, or by oral testimony. The search for papers in any way concerning landed interests in this Territory made in 1855, among the large quantity of old Spanish and Mexican archives then and yet at the territorial governor's office, was imperfectly made, and it is believed that there very probably still remain among them grants, or important papers relating to grants, for lands in this Territory. Another and more thorough search ought to be made, and such papers of that character as should be found transferred to this office, and added to those now here transferred in 1855. A competent and discreet person should also be dispatched to the cities of Mexico, Durango, Chihuahua, and El Paso, in Mexico, authorized and instructed to procure thence all documents and *data* which are important to our Government and people, under and concerning these grants, for as the provincial, territorial, and departmental governments of New Mexico were formerly, at different times, in official connection with each of these capitals, it is nearly certain that official reports, registers, or records of more or less importance in the premises are to be found there, particularly perhaps at the national capitol at the City of Mexico. It is important these grants be segregated from the public domain by survey, and the Government, as well as the grant proprietors, is interested in its being done at an early day. If it shall, as I feel it will be, the policy of the Government to prosecute vigorously the public surveys to completion, in this district, it is the main party interested in having the confirmed private grants ascertained and surveyed at once, or as soon as practicable, since, if the latter be left unascertained and unsurveyed while the former are extended over them, a very considerable surveying expense will have been incurred by the Government unnecessarily, as has been the case heretofore, in some instances, in this district.



The grant owners will be slow to apply for the survey of their tracts and to deposit the funds necessary therefor so long as the work is done at their expense, as now required by law. I believe that the repeal of the statute so requiring would prompt grant owners much more cheerfully and generally to file their claims in this office for adjudication, with a view to their early confirmation and survey, which, in the absence of any present inducement or legal requirement, they manifest little disposition to do. The repeal of the law requiring grant owners to pay for the survey of their lands, when made, would, for the reason stated, seem advisable. All the old private land claims in this Territory are those properly denominated foreign grants, having emanated from the former governments in New Mexico. It is contended by the parties that the law imposing upon them the expense and cost of survey is unfair and unjust, and contrary to the stipulations and principles of the treaty of peace with Mexico, as expressed and implied in the eighth article thereof.

Congress last year (Statutes at Large, vol. 16, p. 416) repealed one of the two laws imposing this private expense, but omitted to repeal a portion of the other, to wit, the third section of the act of May 30, 1862. I trust the legislation thus apparently intended by Congress may be completed, and, if done, would recommend that an appropriation of \$4,317.69 be made, to refund to depositors of money upon their application the portions of their deposits applied. Deeming it probable that Congress will complete the repeal of the deposit law just referred to, and will, in that case, as was formerly done, annually, make an appropriation for the survey of confirmed private land claims in this district, many of which are ready for survey, I have estimated, for that purpose, the sum of \$25,000 for the next fiscal year.

#### MINES AND MINING.

No mining claims have been surveyed since the last annual report, though application has been made for the survey of two, the Chimborazo and the Heuk gold and silver mines, in the county of Taos. I have been reliably informed of no very important discoveries or extensive developments in mining during the year, in addition to those alluded to in my predecessor's last report. Nevertheless, this staple industry of New Mexico has progressed with paying success whenever undertaken with a spirit, and with means at all adequate to a proper working of lodes or placers. The Moreno, in the northeastern; the Corona del Pueblo, in central, and the Silver City, the Pinos Altos, the Chloride, the Silver Flat, and the Lone Mountain mining districts, in southwestern New Mexico, are the only ones within which mining operations have been prosecuted upon any considerable scale during the year. The Aztec mill, upon the valuable mining property of the English company, in the Moreno district, has suspended work for the present, though gulch mining is carried on with success in the vicinity, and the Moreno ditch, which now abundantly supplies water for mining purposes, renders mining prosperous there. The New Mexican Mining Company's mill, formerly operating in Placer Mountain, near this city, for some reason still remains idle, though it is believed the company possesses a valuable mining estate there. Placer mining is carried on in that vicinity, though not by any organized enterprise. Mining operations have been carried on in the Corona del Pueblo district, and further discoveries and developments confirm all previous opinion of the richness of the ores there found. In the Ralston district, west of Silver City, operations are entirely suspended, owing, no doubt, mainly to the want of machinery for the proper working of its abundant rich ores, the miners there interested having hitherto failed to induce capitalists to invest their money in that promising field for its employment. At the flourishing young mining town of Silver City, a spot less than two years ago a wilderness, but now teeming with a thousand busy denizens, Mr. M. W. Breman, an enterprising citizen, has an eleven-stamp quartz mill in profitable operation. At the same place Colonel William L. Rynerson has running five large arrastras, operated by steam, doing a good business, as is also the Wisconsin Mining Company's Alligator mill. In Pinos Altos and Silver Flat districts profitable mining operations are also reported. In the Lone Mountain district, Judge A. H. Hackney has just completed, and put in operation, a fine ten-stamp mill, which will, no doubt, contribute largely to the actual production of that region. In the northwestern portion of the Territory, on the Arizona boundary, there are indications of mining activity, and there has been established there a mining district called the Ruby, embracing, it is stated, a portion of the famous diamond fields said to have been discovered thereabouts.

The recent liberal legislation of Congress, declaring free and open to exploration, occupancy, and purchase the whole mineral-bearing public domain of the United States, will, I have no doubt, impart an increased interest and activity to all kinds of mines and mining operations. All intelligent observers of the mineral indications of this Territory concur in pronouncing them at least equal to those found in any of the great mining regions of the United States. Undoubtedly the latent and undeveloped mining resources, the lodes and placers of this Territory, need but the applica-



tion of capital and machinery to render New Mexico on their account the peer of either of the States and Territories famous for their mineral deposits and coal fields.

Since my arrival here I have been called upon by Major John Ayers, lately appointed to be agent for the Apache Indians at the Tularosa agency, and Captain Thomas Buckley, agent of a corporation which has been formed at San Francisco for the purpose of testing and developing the diamond region, so called, in the northwestern portion of New Mexico and Northeastern Arizona. These gentlemen exhibit and present to me a considerable quantity of precious stones, of great brilliancy and beauty, which they assure me, and I believe, were found in the region spoken of.

Among these are stones said to be well-authenticated and thoroughly tested rough diamonds. There are also the following classes of rough stones: true oriental ruby; hyacinth ruby; spinal ruby; garnet; sapphire proper; emerald; zircon; topaz, of different colors; amethyst; opal, of different varieties; corundum; crystallized alumina; black carbon or diamond; beryl; turmolite, and various other kinds of native jewels of commercial value. I am also assured that the same region contains many very fine specimens of crystallized fossils, including really immense quantities of petrified wood, the latter occurring in what is called fossil groves or forests.

The soil where the precious stones have so far been found in this district is composed of crystalline matter and conglomerate, crushed, broken, and disintegrated by the action of the elements and other natural causes. There is evidence of volcanic influences in the geological formation, lava and scoria occurring frequently and in considerable quantities and masses. The prevailing rock is red and gray sandstone, the formation having the appearance of a sedimentary deposit.

All stones so far found have been picked up upon the surface of the earth, in natural washings, and upon the ant hills. It is believed that when proper energy is bestowed upon this branch of industry in that region it will become of commercial importance. The distance from this city to Fort Defiance, near which the stones are found, is about two hundred miles due west.

#### TERRITORIAL BOUNDARY.

The north, south, and all but a small portion of the east boundary of New Mexico having been surveyed and marked on the face of the earth, it remains to provide for a like establishment of the west boundary. The importance of the execution of this survey has but recently become urgent, owing to the influx and settlement of a considerable permanent mining population along the New Mexico-Arizona line, at different points, and to the settlements at and near the military post of Fort Defiance, and the new Indian reservation of Tularosa, both of which points are situated very near or directly upon the boundary line.

In the region traversed by that line, the discovery of extensive and valuable mines, placers, and diamond fields has been reported, and they are now attracting many hundreds of people to those localities. It is believed that whether this sudden immigration be permanent or not, that section will hereafter be permanently occupied by a considerable mining population, and I respectfully recommend that the interterritorial line be surveyed and marked as soon as practicable.

#### USELESS RESERVATIONS.

I find standing upon the records and maps here, as subsisting, several reservations, which, as they are now useless, might be vacated by Congress without prejudice to the military or Indian interests of the Government in New Mexico. Of these now useless reservations there are two military and two Indian reserves.

First. The military reserve in township 18 north of range 20 east, embracing 5,120 acres, from sections 9 to 16 inclusive. This reserve, as announced to this office by the Commissioner of the General Land Office in his letter of August 29, 1857, was made by the President of the United States on the 18th day of August, 1857. I am informed that the military authorities never actually used, and have no present or prospective need for the land.

Second. The military reserve known as the Fort Butler reservation, embracing 76,800 acres, on the Canadian Fork of Red River, in townships 12 and 13 north of ranges 27, 28, and 29 east. The reservation was probably unduly made and announced. The register of the United States land office at Santa Fé, December 15, 1860, officially informed the surveyor general that the tract had been, "by authority of the President of the United States, reserved from sale and location for military purposes." The statement was taken as authoritative and accurate. I am not aware that the reserve was ever used as such, and am informed that there is no prospective need for it.

Third. The Bosque Redondo Indian reservation, of forty miles square, on the Pecos River, embracing the old Fort Sumner military reserve, which was vacated as useless by Congress, February 24, 1871. This reservation was made by President Lincoln, January 15, 1864, for the Navajo and Apache Indians, and was for some time occupied as intended. But the Navajoes now occupy another reservation, which was provided for them in the treaty of 1868, in Northwestern New Mexico and Northeastern Arizona.



and the Apaches are located now, I believe, at Fort Stanton. The Indian Bureau, in a letter to the General Land Office of July 20, 1871, reports no further use for the Bosque Redondo as a reservation, and the tract now abandoned is rapidly filling up with settlers.

Fourth. The Gila Apache Indian reserve, fifteen miles square, at Santa Lucia spring, upon the head-waters of the Gila River. The regular *status* of the reservation appears to have been recognized by the Interior Department in 1860, and a letter to the surveyor general of February 15, 1862, from the Commissioner of the General Land Office, treats the reserve as a subsisting one. But it has not for many years been occupied by the Indians, and there is no doubt it has been permanently abandoned.

#### MISCELLANEOUS.

Owing to the imperfect manner in which both public and private surveys were often executed in former years in this district, it is sometimes found that it is important to have made upon the ground a personal inspection and investigation, or a correction of erroneous or defective work, in order to a necessary understanding of the relations of surveys crossing or affecting one the other, and the surveyor general should have at his disposition a fund sufficient to enable him to proceed or dispatch an authorized agent to the field to obtain by survey, retracing or otherwise, the information desired. In some instances grants have not been duly connected with the public surveys, and *vice versa*, and none of the military or Indian reservations, though contiguous to or within the public surveys, have been connected with them. In the instances of contact in these cases, it is impossible properly to calculate the contents of adjoining fractional lots. In the investigation and adjudication also of titles to lands under Spanish and Mexican grants, it is often essential to ascertain, by formal inquiry upon the ground, the locality and extent of tracts of land and their boundary calls, and also to settle questions in necessary connection therewith. It is very questionable, I think, whether the appropriations made by Congress, always for a specific purpose, would be held to be applicable to any of these uses; nor if they were, would it be desirable, if it could be avoided to decrease them thereby in amount, or to divert any portion of them from the intended object. I recommend an appropriation for the purpose indicated of \$2,000.

The surveyor general of New Mexico being, under the statute creating his office, invested and charged with authority and duties larger and more responsible than those of any other similar officer, except the surveyor general of Colorado, it would seem proper that he should possess authority to have and use a seal of office. As the custodian of old Spanish and Mexican archives constituting or relating to landed interests in this Territory, his certificates are frequently necessary in connection with suits in court, or otherwise, in the Territory, and for use abroad, and in either case they ought to be authenticated by the official seal, as well as by the signature of the surveyor general. Since the passage of the law of May 10, 1872, contemplating the appointing and commissioning of mineral deputy surveyors over the district by the surveyor general, the propriety of his using an official seal to accredit the commissions furnished to these deputies, I consider manifest. One of my predecessors procured, and for some time used, an official seal, one of proper design and device, but the Commissioner of the General Land Office prohibited its further use as being unauthorized by law. I recommended that the surveyor general be authorized by law to resume its use for the purpose of authenticating his certificates and of accrediting his commissions issued to mineral deputy surveyors.

#### *Documents accompanying this report.*

A. List of surveyed townships, and contents thereof in acres, in New Mexico, June 30, 1872.

B. Statement of all surveys, not of public lands, in New Mexico, June 30, 1872.

C. Statement of public surveys made in New Mexico during the year ending June 30, 1872.

D. Statement showing the condition June 30, 1872, of special deposits of funds made for town site, mineral, public land, and confirmed private land-claim surveys in New Mexico.

E. General map of the Territory and land district of New Mexico.

F. Statement of the expenditures in the office of surveyor general of New Mexico on account of salaries during the fiscal year ending June 30, 1872.

G. Statement of expenditures in the office of surveyor general of New Mexico on account of incidental expenses during the fiscal year ending June 30, 1872.

H. Estimates for appropriations required for the surveying service in the district of New Mexico for the fiscal year ending June 30, 1874.

Very respectfully, your obedient servant,

JAMES K. PROUDFIT,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



A.—List of surveyed townships and contents thereof in acres in the district of New Mexico at the close of the fiscal year ending June 30, 1872.

Whole number subdivided.	Township.	Range.	Public land.	Private claims.	Reservations.	Total.	Remarks.
			Acres.	Acres.	Acres.	Acres.	
1	2 north.	26 east..	23,056.60	.....	.....	23,056.60	
2	3 north.	....do....	23,036.72	.....	.....	23,036.72	
3	5 north.	21 east..	23,165.61	.....	.....	23,165.61	
4	....do....	23 east..	23,017.68	.....	.....	23,017.68	
5	....do....	24 east..	23,029.04	.....	.....	23,029.04	
6	6 north.	20 east..	22,956.08	.....	.....	22,956.08	
7	....do....	22 east..	23,120.75	.....	.....	23,120.75	
8	....do....	23 east..	23,027.22	.....	.....	23,027.22	
9	7 north.	21 east..	23,024.48	.....	.....	23,024.48	
10	....do....	22 east..	23,117.05	.....	.....	23,117.05	
11	....do....	23 east..	22,915.29	.....	.....	22,915.29	
12	8 north.	21 east..	23,193.80	.....	.....	23,193.80	
13	....do....	22 east..	23,220.83	.....	.....	23,220.83	
14	19 south.	19 west..	23,075.44	.....	.....	23,075.44	
15	....do....	20 west..	23,089.34	.....	.....	23,089.34	
16	22 south.	18 west..	23,059.16	.....	.....	23,059.16	
17	....do....	19 west..	22,950.59	.....	.....	22,950.59	
18	23 south.	18 west..	23,078.46	.....	.....	23,078.46	
19	....do....	19 west..	23,074.99	.....	.....	23,074.99	
20	24 south.	....do....	23,085.96	.....	.....	23,085.96	
21	9 north.	8 east..	23,068.75	.....	.....	23,068.75	
22	....do....	9 east..	23,059.83	.....	.....	23,059.83	
23	....do....	10 east..	23,043.58	.....	.....	23,043.58	
24	....do....	11 east..	23,024.07	.....	.....	23,024.07	
25	....do....	21 east..	14,612.90	8,415.18	.....	23,028.08	Partly in José L. Perea grant.
26	10 north.	8 east..	23,050.10	.....	.....	23,050.10	
27	....do....	9 east..	23,046.58	.....	.....	23,046.58	
28	....do....	10 east..	23,045.14	.....	.....	23,045.14	
29	....do....	11 east..	22,963.79	.....	.....	22,963.79	
30	11 north.	8 east..	23,031.70	.....	.....	23,031.70	
31	....do....	9 east..	23,073.22	.....	.....	23,073.22	
32	....do....	10 east..	23,074.35	.....	.....	23,074.35	
33	12 north.	8 east..	14,384.16	9,286.13	.....	23,670.29	Partly in Ortiz mine grant.
34	....do....	9 east..	23,416.19	.....	.....	23,416.19	
35	....do....	10 east..	23,526.84	.....	.....	23,526.84	
36	13 north.	9 east..	11,472.75	.....	.....	11,472.75	Fractional township.
37	....do....	22 east..	12,081.28	11,050.00	.....	23,131.28	The areas are approximate, as the intersection of the private claim No. 1, Preston Beek, are not noted in the field-notes.
38	....do....	23 east..	23,015.75	.....	.....	23,015.75	
39	....do....	26 east..	.....	23,046.74	.....	23,046.74	In the Pablo Montoya grant.
40	....do....	27 east..	.....	22,754.12	.....	22,754.12	Do.
41	....do....	29 east..	.....	22,831.07	.....	22,831.07	Do.
42	....do....	30 east..	.....	22,626.41	.....	22,626.41	In Baca heir location, No. 2, and Pablo Montoya grant.
43	....do....	31 east..	9,683.50	13,115.88	.....	22,799.38	Do.
44	....do....	32 east..	22,869.63	.....	.....	22,869.63	
45	....do....	33 east..	22,682.62	.....	.....	22,682.62	
46	14 north.	8 east..	17,660.80	5,518.30	.....	23,179.10	Partly in Ortiz mine grant.
47	....do....	9 east..	11,597.47	.....	.....	11,597.47	Fractional township.
48	....do....	23 east..	22,830.88	.....	.....	22,830.88	
49	....do....	25 east..	4,452.00	18,564.17	.....	23,016.17	Partly in Pablo Montoya grant.
50	....do....	26 east..	.....	22,532.24	.....	22,532.24	In the Pablo Montoya grant.
51	....do....	30 east..	6,191.63	16,859.84	.....	23,051.47	Partly in Baca heir's location No. 2, and Pablo Montoya grant.
52	....do....	31 east..	18,137.50	4,937.05	.....	23,074.55	Partly in Baca heir's location No. 2.
53	....do....	32 east..	23,030.08	.....	.....	23,030.08	
54	15 north.	8 east..	23,025.48	.....	.....	23,025.48	
55	....do....	9 east..	23,027.67	.....	.....	23,027.67	
56	....do....	24 east..	11,093.58	8,262.00	.....	19,355.58	Fractional township, partly in Pablo Montoya grant.
57	....do....	25 east..	.....	22,783.21	.....	22,783.21	In the Pablo Montoya grant.
58	....do....	26 east..	.....	22,940.93	.....	22,940.93	Do.
59	....do....	27 east..	.....	22,964.06	.....	22,964.06	Do.



## A.—List of surveyed townships and contents thereof, &amp;c.—Continued.

Whole number subdivided.	Township.	Range.	Public land.	Private claims.	Reservations.	Total.	Remarks.
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	
60	15 north.	32 east..	22,980.79	.....	.....	22,980.79	
61	17 north.	5 east..	4,817.43	.....	.....	4,817.43	Fractional township.
62	....do....	6 east..	3,440.26	.....	.....	3,440.26	Do.
63	18 north.	20 east..	17,951.39	.....	5,120.00	23,071.39	Embracing military reservation.
64	19 north.	4 east..	9,508.21	.....	.....	9,508.21	Fractional township.
65	....do....	5 east..	4,112.56	.....	.....	4,112.56	Do.
66	....do....	6 east..	12,032.40	.....	.....	12,032.40	Do.
67	20 north.	3 east..	2,262.43	.....	.....	2,262.43	Do.
68	....do....	4 east..	12,843.65	.....	.....	12,843.65	Do.
69	....do....	5 east..	5,083.24	.....	.....	5,083.24	Do.
70	3 south.	....do....	22,879.55	.....	.....	22,879.55	
71	4 south.	3 east..	23,014.84	.....	.....	23,014.84	
72	....do....	4 east..	22,968.39	.....	.....	22,968.39	
73	....do....	5 east..	23,025.17	.....	.....	23,025.17	
74	5 south.	3 east..	23,024.15	.....	.....	23,024.15	
75	....do....	4 east..	23,036.95	.....	.....	23,036.95	
76	....do....	5 east..	22,906.78	.....	.....	22,906.78	
77	6 south.	3 east..	22,959.41	.....	.....	22,959.41	
78	....do....	4 east..	22,938.65	.....	.....	22,938.65	
79	7 south.	2 east..	22,906.84	.....	.....	22,906.84	
80	....do....	3 east..	22,990.66	.....	.....	22,990.66	
81	....do....	4 east..	23,002.62	.....	.....	23,002.62	
82	8 south.	....do....	22,950.68	.....	.....	22,950.68	
83	9 south.	16 east..	23,076.13	.....	.....	23,076.13	
84	10 south.	....do....	23,058.46	.....	.....	23,058.46	
85	....do....	17 east..	23,072.32	.....	.....	23,072.32	
86	....do....	24 east..	23,082.68	.....	.....	23,082.68	
87	11 south.	13 east..	23,058.45	.....	.....	23,058.45	
88	....do....	14 east..	23,049.36	.....	.....	23,049.36	
89	....do....	17 east..	23,405.61	.....	.....	23,405.61	
90	....do....	18 east..	23,107.06	.....	.....	23,107.06	
91	....do....	19 east..	23,194.64	.....	.....	23,194.64	
92	....do....	21 east..	23,145.68	.....	.....	23,145.68	
93	....do....	22 east..	23,155.24	.....	.....	23,155.24	
94	....do....	23 east..	23,101.05	.....	.....	23,101.05	
95	....do....	24 east..	23,099.00	.....	.....	23,099.00	
96	....do....	25 east..	23,161.76	.....	.....	23,161.76	
97	12 south.	1 east..	15,310.10	.....	.....	15,310.10	Fractional township.
98	....do....	22 east..	23,203.15	.....	.....	23,203.15	
99	....do....	23 east..	23,165.72	.....	.....	23,165.72	
100	13 south.	1 east..	21,007.64	.....	.....	21,007.64	Fractional township.
101	....do....	1 west..	23,100.97	.....	.....	23,100.97	
102	14 south.	....do....	23,086.01	.....	.....	23,086.01	
103	....do....	4 west..	4,101.02	.....	.....	4,101.02	Fractional township.
104	....do....	5 west..	23,096.40	.....	.....	23,096.40	
105	....do....	1 east..	22,999.48	.....	.....	22,999.48	
106	....do....	9 east..	22,965.83	.....	.....	22,965.83	
107	....do....	10 east..	23,076.73	.....	.....	23,076.73	
108	15 south.	1 east..	22,977.00	.....	.....	22,977.00	
109	....do....	2 east..	8,892.25	.....	.....	8,892.25	Fractional township.
110	....do....	9 east..	23,099.02	.....	.....	23,099.02	
111	....do....	10 east..	23,046.95	.....	.....	23,046.95	
112	....do....	1 west..	23,058.71	.....	.....	23,058.71	
113	....do....	2 west..	22,985.28	.....	.....	22,985.28	
114	16 south.	1 west..	22,891.22	.....	.....	22,891.22	
115	....do....	2 west..	22,904.42	.....	.....	22,904.42	
116	....do....	13 west..	22,905.68	.....	.....	22,905.68	
117	....do....	1 east..	22,951.50	.....	.....	22,951.50	
118	....do....	2 east..	13,733.75	.....	.....	13,733.75	Fractional township.
119	17 south.	1 east..	23,020.36	.....	.....	23,020.36	
120	....do....	2 east..	22,786.73	.....	.....	22,786.73	Fractional township.
121	....do....	1 west..	22,941.33	.....	.....	22,941.33	
122	....do....	2 west..	23,043.13	.....	.....	23,043.13	
123	....do....	3 west..	2,880.28	.....	.....	2,880.28	Fractional township.
124	....do....	12 west..	22,378.81	31.21	707.20	23,117.22	Including Fort Bayard military reserve and San Augustin mine.
125	....do....	13 west..	14,817.83	.....	8,132.80	22,950.63	Including Fort Bayard military reserve.
126	18 south.	1 west..	23,007.33	.....	.....	23,007.33	
127	....do....	2 west..	17,830.76	.....	.....	17,830.76	Fractional township.
128	....do....	3 west..	1,613.02	.....	.....	1,613.02	Do.
129	....do....	4 west..	9,185.52	.....	.....	9,185.52	Do.
130	....do....	5 west..	23,023.57	.....	.....	23,023.57	Do.



## A.—List of surveyed townships and contents thereof, &amp;c.—Continued.

Whole number subdivided.	Township.	Range.	Public land.	Private claims.	Reservations.	Total.	Remarks.
			Acres.	Acres.	Acres.	Acres.	
131	18 south.	10 west.	23, 113. 56	.....	.....	23, 113. 56	
132	do.	1 east.	22, 984. 10	.....	.....	22, 984. 10	
133	do.	2 east.	22, 898. 33	.....	.....	22, 898. 33	
134	do.	3 east.	14, 082. 07	.....	.....	14, 082. 07	Fractional township.
135	19 south.	1 east.	23, 120. 12	.....	.....	23, 120. 12	
136	do.	2 east.	22, 996. 65	.....	.....	22, 996. 65	
137	do.	3 east.	20, 522. 13	.....	.....	20, 522. 13	Fractional township.
138	do.	1 west.	22, 365. 97	.....	.....	22, 365. 97	Do.
139	do.	3 west.	16, 117. 07	.....	.....	16, 117. 07	Do.
140	do.	4 west.	22, 787. 47	.....	.....	22, 787. 47	Do.
141	do.	5 west.	23, 018. 82	.....	.....	23, 018. 82	
142	do.	10 west.	23, 115. 18	.....	.....	23, 115. 18	
143	20 south.	1 west.	14, 297. 33	.....	.....	14, 297. 33	Fractional township.
144	do.	2 west.	994. 02	.....	.....	994. 02	Do.
145	do.	10 west.	23, 070. 84	.....	.....	23, 070. 84	
146	do.	11 west.	23, 042. 47	.....	.....	23, 042. 47	
147	do.	1 east.	23, 071. 98	.....	.....	23, 071. 98	
148	do.	2 east.	22, 999. 67	.....	.....	22, 999. 67	
149	do.	3 east.	20, 968. 97	.....	.....	20, 968. 97	Fractional township.
150	21 south.	2 east.	21, 527. 10	.....	.....	21, 527. 10	Do.
151	do.	3 east.	21, 200. 85	.....	.....	21, 200. 85	Do.
152	do.	5 east.	20, 365. 56	.....	.....	20, 365. 56	Do.
153	22 south.	2 east.	22, 996. 94	.....	.....	22, 996. 94	
154	do.	3 east.	18, 793. 98	.....	.....	18, 793. 98	Fractional township.
155	do.	4 east.	9, 966. 53	.....	.....	9, 966. 53	Do.
156	do.	5 east.	22, 713. 46	.....	.....	22, 713. 46	Do.
157	23 south.	3 east.	17, 643. 12	.....	.....	17, 643. 12	Do.
158	do.	5 east.	22, 185. 40	.....	.....	22, 185. 40	
159	24 south.	do.	23, 001. 99	.....	.....	23, 001. 99	
160	do.	6 east.	23, 047. 85	.....	.....	23, 047. 85	
161	do.	1 west.	23, 032. 30	.....	.....	23, 032. 30	
162	do.	2 west.	23, 021. 68	.....	.....	23, 021. 68	
163	25 south.	1 west.	23, 030. 31	.....	.....	23, 030. 31	
164	do.	2 west.	23, 007. 92	.....	.....	23, 007. 92	
165	do.	1 east.	22, 992. 07	.....	.....	22, 992. 07	
166	do.	4 east.	23, 062. 76	.....	.....	23, 062. 76	
167	do.	5 east.	23, 040. 52	.....	.....	23, 040. 52	
168	do.	6 east.	23, 031. 44	.....	.....	23, 031. 44	
169	8 north.	23 east.	23, 173. 66	.....	.....	23, 173. 66	
			3, 248, 463. 09	278, 518. 54	13, 960. 00	3, 540, 941. 63	

JAMES K. PROUDFIT,  
Surveyor General.

SURVEYOR GENERAL'S OFFICE,  
Santa Fé, New Mexico, September 30, 1872.



## B.—Statement of all surveys not of public land in the district of New Mexico to the close of the fiscal year ending June 30, 1872.

Statute designation.	Name of tract.	Character of claim.	Locality.	Confirmer or present claimant.	Statute confirming.	Area in acres.
Letter A.....	Jemez Pueblo.....	Spanish grant.....	Santa Aña County.....	Inhabitants of the pueblo.....	Dec. 22, 1858	17,510.45
Letter C.....	San Juan Pueblo.....	do.....	Rio Arriba County.....	do.....	Dec. 22, 1858	17,544.77
Letter D.....	Pieuris Pueblo.....	do.....	do.....	do.....	Dec. 22, 1858	17,460.69
Letter E.....	San Felipe Pueblo.....	do.....	Santa Aña County.....	do.....	Dec. 22, 1858	34,766.86
Letter F.....	Pecos Pueblo.....	do.....	San Miguel County.....	do.....	Dec. 22, 1858	18,763.33
Letter G.....	Cochite Pueblo.....	do.....	Santa Aña County.....	do.....	Dec. 22, 1858	24,256.50
Letter H.....	Santo Domingo Pueblo.....	do.....	do.....	do.....	Dec. 22, 1858	74,743.11
Letter I.....	Taos Pueblo.....	do.....	Taos County.....	do.....	Dec. 22, 1858	17,360.55
Letter K.....	Santa Clara Pueblo.....	do.....	Rio Arriba County.....	do.....	Dec. 22, 1858	17,368.52
Letter L.....	Tesuque Pueblo.....	do.....	Santa Fé County.....	do.....	Dec. 22, 1858	17,471.12
Letter M.....	San Ildefonso Pueblo.....	do.....	do.....	do.....	Dec. 22, 1858	17,292.64
Letter N.....	Pojoaque Pueblo.....	do.....	do.....	do.....	Dec. 22, 1858	13,520.38
Letter O.....	Zia Pueblo.....	do.....	Santa Aña County.....	do.....	Dec. 22, 1858	17,514.63
Letter P.....	Sandia Pueblo.....	do.....	do.....	do.....	Dec. 22, 1858	24,187.29
Letter Q.....	Isleta Pueblo.....	do.....	Bernalillo County.....	do.....	Dec. 22, 1858	110,080.31
Letter R.....	Hambe Pueblo.....	do.....	Santa Fé County.....	do.....	Dec. 22, 1858	13,586.33
No. 1.....	San Juan Bautista.....	Mexican grant.....	San Miguel County.....	Preston Beek, assignee.....	June 21, 1860	318,699.72
No. 2.....	Tome Town.....	Spanish grant.....	Socorro and Valencia Counties.....	Inhabitants of town.....	June 21, 1860	121,594.53
No. 7.....	Tecolote Town.....	Mexican grant.....	San Miguel County.....	do.....	June 21, 1860	21,636.83
No. 8.....	Los Trigos.....	Spanish grant.....	do.....	Francisco Trujillo <i>et al</i> .....	June 21, 1860	12,545.66
No. 10.....	Nuestra Señora de La Luz.....	do.....	Santa Fé County.....	Bishop John Lamy.....	June 21, 1860	16,546.85
No. 11.....	Chilili Town.....	Mexican grant.....	Bernalillo County.....	Inhabitants of town.....	June 21, 1860	38,435.14
No. 13.....	Belen Town.....	Spanish grant.....	Socorro and Valencia Counties.....	do.....	June 21, 1860	194,663.75
No. 14.....	San Pedro.....	Mexican grant.....	Santa Fé County.....	do.....	June 21, 1860	35,911.63
No. 16.....	San Cristobal Rancho.....	do.....	do.....	Jose Serafin Ramirez.....	June 21, 1860	27,854.06
No. 16.....	Los Esteros.....	do.....	San Miguel County.....	Eathan W. Eaton.....	June 21, 1860	17,712.00
No. 20.....	Las Vegas.....	do.....	do.....	do.....	June 21, 1860	496,446.96
No. 20.....	Location Number Two.....	American grant.....	do.....	Inhabitants of town.....	June 21, 1860	99,289.39
No. 29.....	Antonchico Town.....	Spanish grant.....	do.....	Luis M. Baca's heirs.....	June 21, 1860	389,662.72
No. 32.....	Mora Town.....	Mexican grant.....	do.....	Inhabitants of town.....	June 21, 1860	827,621.01
No. 35.....	Bosque del Apache.....	do.....	Mora and San Miguel Counties.....	do.....	June 21, 1860	60,117.39
No. 41.....	Montoya grant.....	do.....	Socorro County.....	Antonio Sandoval.....	June 21, 1860	655,458.07
No. 43.....	Ortiz Mine.....	do.....	San Miguel County.....	Pablo Montoya's heirs.....	Mar. 3, 1869	69,458.33
No. 70.....	Cañon del Agua.....	do.....	Santa Fé County.....	Elisha Whittlesey <i>et al</i> .....	Mar. 1, 1861	3,501.21
Treaty, June 1, 1868.	Navajo reserve.....	Indian reservation.....	do.....	Jose S. Ramirez.....	June 12, 1866	1,158,960.00
	Santa Lucia.....	do.....	Taos, Rio Arriba, and Santa Aña Co's.....	Navajo Indians.....	April 10, 1869	144,000.00
	Fort Marey.....	Military reservation.....	Grant County.....	Apache Indians.....		17.70
	Fort Union.....	do.....	Santa Fé County.....	United States.....		32,960.00
	Fort Union timber.....	do.....	Mora County.....	do.....		33,920.00
	Fort Bayard.....	do.....	do.....	do.....		8,840.00
	Fort Cummings.....	do.....	Grant County.....	do.....		2,560.00
	Fort Craig.....	do.....	do.....	do.....		24,795.00
	Fort MeRae.....	do.....	Socorro County.....	do.....		2,560.00
	Fort Selden.....	do.....	Socorro and Doña Aña Counties.....	do.....		9,600.74
		do.....	Doña Aña County.....	do.....		



B.—Statement of all surveys not of public land in the district of New Mexico, &c.—Continued.

Statute designation.	Name of tract.	Character of claim.	Locality.	Confirmer or present claimant.	Statute confirming.	Area in acres.
	Fort Stanton.....	Military reserve.....	Lincoln County.....	United States.....	.....	10,240.00
	Fort Wingate.....	do.....	Santa Aña County.....	do.....	.....	64,000.00
	Santa Rita del Cobre Mine.....	Mining claim.....	Grant County.....	Santa Rita Mining Association.....	.....	31.21
	San Agustin.....	do.....	Doña Aña County.....	San Agustin Mining Company.....	.....	20.66
Total acres ..	.....	.....	.....	.....	.....	5,353,088.04

SURVEYOR GENERAL'S OFFICE, Santa Fé, New Mexico, September 30, 1872.

JAMES K. PROUDFIT, Surveyor General.

C.—Statement of public surveys made in the district of New Mexico during the fiscal year ending June 30, 1872.

Contract.		Contractor.	Character of work.	Township.	Range.	Surveyed.	Rate.	Cost.
No.	Date.							
43	Sept. 28, 1871	R. B. Willison...	Second standard parallel north.....		29, 30, 31, 32, 33, 34, 35, 36, 37 east.	Mls. chs. lks. 49 28 55	\$15 00	\$740 35
43	Sept. 28, 1871	do.....	Exteriors.....	9 north.....	29, 30, 31, 32, 33, 34, 35, 36 east.	95 77 13		
43	Sept. 28, 1871	do.....	do.....	10 north.....	29, 30, 31, 32, 33, 34, 35, 36 east.	95 71 51	} 12 00	5,278 70
43	Sept. 28, 1871	do.....	do.....	11 north.....	29, 30, 31, 32, 33, 34, 35, 36 east.	95 74 62		
43	Sept. 28, 1871	do.....	do.....	12 north.....	29, 30, 31, 32, 33, 34, 35, 36 east.	47 62 61		
43	Sept. 28, 1871	do.....	do.....	13 north.....	34, 35, 36 east.....	36 00 71		
43	Sept. 28, 1871	do.....	do.....	14 north.....	33, 34, 35, 36 east.....	47 75 50		
43	Sept. 28, 1871	do.....	do.....	9, 10, 11, 13, 14 north..	37 east.....	6 14 07		
43	Sept. 28, 1871	do.....	do.....			1 0 00		
			Re-establishment corner to townships 10 and 11 north, ranges 28 and 29 east.			1 69 92	} 15 00	2,070 00
43	Sept. 28, 1871	do.....	Connections with third standard parallel north.....			11 24 97		
43	Sept. 28, 1871	do.....	Connection with east boundary of New Mexico.....			138 0 00	15 00	90 00
44	Feb. 17, 1872	do.....	Base line.....		5 to 27 east, inclusive.....	6 0 00	15 00	1,786 71
44	Feb. 17, 1872	do.....	Third standard parallel north.....		25 east.....	148 71 44	12 00	2 81
44	Feb. 17, 1872	do.....	Exteriors.....	1, 2, 3, 4 north.....	22, 23, 24 east.....	18 75	12 00	76 75
44	Feb. 17, 1872	do.....	Connections with first standard parallel north.....			7 54 00	10 00	29 95
45	Apr. 17, 1872	William White	Subdivisional.....	14 north.....	8 east.....	2 79 59	10 00	6 00
45	Apr. 17, 1872	do.....	Re-establishing section lines.....	14 north.....	8 east.....	40 00	12 00	861 09
45	Apr. 17, 1872	do.....	Re-establishing range lines.....	14 north.....	8 east.....	71 60 62	12 00	1,200 09
46	Apr. 27, 1872	R. B. Willison...	Exteriors.....	1, 2, 3 north.....	25, 26 east.....	120 0 75	10 00	
46	Apr. 27, 1872	do.....	Subdivisional.....	2, 3 north.....	26 east.....			

SURVEYOR GENERAL'S OFFICE, Santa Fé, New Mexico, September 30, 1872.

JAMES K. PROUDFIT, Surveyor General.



DR.

D.—Town site, mineral, public land, and confirmed private land claim survey special deposits in account with the United States.

CR.

Sept. 17, 1866	For cost of field work—Carey's deposit.....	\$703 91		Aug. 9, 1866	By A. B. Carey, for survey of San Pedro and Cañon del Agua private land claims—field work.	\$936 00	
Sept. 18, 1866	For amount refunded in excess of field work—Carey's deposit.	232 09		Aug. 9, 1866	By same for same—office work .....	200 00	
Jan. 5, 1867	For cost of office work—Carey's deposit.....	197 35		May 31, 1869	By L. B. Maxwell, for survey of the Beaubien and Miranda private land claim—field work.	5,000 00	\$1,136 00
Jan. 24, 1867	For amount refunded in excess of office work—Carey's deposit.	2 65	\$1,136 00	May 31, 1869	By same for same—office work .....	500 00	
Aug. 8, 1869	For cost of field work—Rosenthal's deposit...	30 00		June 18, 1869	By W. Rosenthal, for survey of Santa Rita mineral claim—notice.	15 00	5,500 00
Aug. 24, 1869	For cost of notice—Rosenthal's deposit .....	15 00		June 18, 1869	By same for same—field work .....	30 00	
Aug. 28, 1869	For cost of office work—Rosenthal's deposit ..	53 10		June 18, 1869	By same for same—office work .....	55 00	100 00
Aug. 28, 1869	For amount refunded in excess of office work—Rosenthal's deposit.	1 90	100 00	July 7, 1870	By W. F. Shedd, for survey of San Agustin mineral claim—field work.	50 00	
May 12, 1870	For amount refunded field work—L. B. Maxwell's deposit.	5,000 00	5,500 00	July 7, 1870	By same for same—office work .....	100 00	150 00
May 12, 1870	For amount refunded office work—L. B. Maxwell's deposit.	500 00		Jan. 12, 1871	By José L. Perea, for survey of Esteros private land claim—field work.	375 00	
July 23, 1870	For cost of field work—Shedd's deposit .....	50 00		Jan. 12, 1871	By same for same—office work .....	75 00	450 00
July 28, 1870	For cost of office work—Shedd's deposit.....	72 92		June 29, 1871	By J. S. Watts, for survey of Pablo Montoya private land claim—field work.	1,500 00	
July 28, 1870	For amount refunded in excess of office work—Shedd's deposit.	27 08	150 00	June 29, 1871	By same for same—office work .....	150 00	1,650 00
Aug. 22, 1871	For cost of field work—Perea's deposit .....	321 32		Sept. 21, 1871	By S. B. Elkins, for survey of Bosque del Apache private land claim—field work.	750 00	
Aug. 22, 1871	For cost of office work—Perea's deposit .....	73 47	394 79	Sept. 21, 1871	By same for same—office work .....	100 00	850 00
Feb. 12, 1872	For cost of field work—Elkins's deposit.....	627 55		Jan. 12, 1872	By probate judge of Grant County, for survey of Silver City town site—field work.	125 00	
Feb. 12, 1872	For cost of office work—Elkins's deposit .....	87 61		Jan. 12, 1872	By same for same—office work .....	125 00	250 00
May 8, 1872	For amount refunded in excess of field work—Elkins's deposit.	122 45		Mar. 29, 1872	By Samuel Ellison, for settlers for survey of township 14 north, range 8 east—field work.	400 00	
May 8, 1872	For amount refunded in excess of office work—Elkins's deposit.	12 39	850 00	Mar. 29, 1872	By same for same—office work .....	100 00	500 00
May 8, 1872	For amount refunded in excess of field work—Perea's deposit.	53 68		April 26, 1872	By Peter Maxwell, for settlers for survey of townships 2 and 3 north, range 26 east—field work.	2,350 00	
May 8, 1872	For amount refunded in excess of office work—Perea's deposit	1 53	55 21	April 26, 1872	By same for same—office work.....	150 00	2,500 00
	Balance on deposit June 30, 1872 .....		6,000 00	June 3, 1872	By John S. Watts, additional for survey of Pablo Montoya private land claim—field work.	1,000 00	
				June 3, 1872	By same additional for same—office work .....	100 00	1,100 00
			14,186 00				14,186 00



F.—Statement of expenditures in the office of the surveyor general of New Mexico for salaries during the fiscal year ending June 30, 1872.

Fiscal quarter.	Name.	Position.	Salary.	Time.		Amount.
				From, inclusive.	To, inclusive.	
First .....	T. Rush Spencer...	Surveyor general.....	\$3,000	July 1	Sept. 30	\$750 00
	David J. Miller....	Chief clerk and translator.....	2,000	July 1	Sept. 30	500 00
	William White....	Draughtsman .....	1,500	July 1	Sept. 30	375 00
Second....	T. Rush Spencer...	Surveyor general.....	3,000	Oct. 1	Dec. 31	750 00
	David J. Miller....	Chief clerk and translator.....	2,000	Oct. 1	Dec. 31	500 00
	William White....	Draughtsman .....	1,500	Oct. 1	Dec. 31	375 00
Third ...	T. Rush Spencer...	Surveyor general.....	3,000	Jan. 1	Mar. 31	750 00
	David J. Miller....	Chief clerk and translator.....	2,000	Jan. 1	Mar. 31	500 00
	William White....	Draughtsman .....	1,500	Jan. 1	Mar. 31	375 00
Fourth ..	J. Howe Watts....	Clerk .....	1,500	Mar. 11	Mar. 31	86 53
	T. Rnsh Spencer...	Surveyor general.....	3,000	April 1	June 19	659 34
	David J. Miller....	Chief clerk and translator.....	2,000	April 1	June 30	500 00
	William White....	Draughtsman .....	1,500	April 1	May 22	} 309 06
	William White....	do .....	1,500	June 8	June 30	
	J. Howe Watts....	Clerk .....	1,500	April 1	April 13	} 218 40
	do .....	do .....	1,500	May 22	June 30	
	William McMullin.	do .....	1,500	June 20	June 30	45 32
Total during fiscal year.....						6,693 65

JAMES K. PROUDFIT, *Surveyor General.*

SURVEROR GENERAL'S OFFICE,  
*Santa Fé, New Mexico, September 30, 1872.*

G.—Statement of incidental expenditures in the office of the surveyor general of New Mexico during the fiscal year ending June 30, 1872.

Fiscal quarter.	Name.	Consideration.	Time.		Amount.	Remarks.
			From, inclusive.	To, inclusive.		
First .....	T. Rush Spencer..	Sundries .....	July 1	Sept. 30	\$233 44	} Vouchers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
	Luis Gold.....	Rent of office..	July 1	Sept. 30	100 00	
Second.....	T. Rush Spencer..	Sundries .....	Oct. 1	Dec. 31	283 17	} Vouchers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.
	Luis Gold.....	Rent of office..	Oct. 1	Dec. 31	100 00	
Third .....	T. Rush Spencer..	Sundries .....	Jan. 1	Mar. 31	327 50	} Vouchers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11.
	Luis Gold.....	Rent of office..	Jan. 1	Mar. 31	100 00	
Founrth.....	David J. Miller..	Sundries .....	April 1	June 30	353 13	} Vouchers 1, 2, 3, 4, 5, 6, 7, 8, 9.
	Luis Gold.....	Rent of office..	April 1	June 30	100 00	
Total.....					1,597 24	

JAMES K. PROUDFIT,  
*Surveyor General.*

SURVEYOR GENERAL'S OFFICE,  
*Santa Fé, New Mexico, September 30, 1872.*

H.—Estimates of the surveyor general for appropriations required for the surveying service in New Mexico for the fiscal year ending June 30, 1874.

On salary account:	
For salary of surveyor general .....	\$3,000
For salary of chief clerk.....	2,000
For salary of translator and interpreter.....	2,000
For salary of five draughtsmen, \$1,800 each.....	9,000
For salary of four clerks, \$1,750 each .....	7,000
23,000	
On contingent account:	
For office rent, stationery, messenger, fuel, &c. ....	2,750



H.—*Estimates of surveyor general of New Mexico for appropriations, &c.*—Continued.

On surveying account:

For public surveys, base, standard parallel, exterior township and sub-divisional lines.....	\$214, 806
For private claim surveys, private land claims confirmed by Congress under act of July 22, 1854.....	25, 000
	<hr/> 265, 556 <hr/>

JAMES K. PROUDFIT,  
*Surveyor General.*

SURVEYOR GENERAL'S OFFICE,  
*Santa Fé, New Mexico, September 30, 1872.*

H.—*Report of the surveyor general of Colorado.*

SURVEYOR GENERAL'S OFFICE,  
*Denver, Colorado Territory, October 1, 1872.*

SIR: I have the honor to submit the official operations of this office for the year ending June 30, 1872, together with an estimation for the surveying service for the year ending June 30, 1874, and office expenses for the same year.

Statement A, showing the surveys made under the regular appropriation for the year ending June 30, 1872.

Statement B, showing the surveys made under act of Congress approved March 3, 1871, on the Kansas Pacific Railway grant.

Statement C, showing the surveys made under the act of Congress approved May 30, 1862, and the amendatory act thereto, approved March 3, 1871.

Statement D, containing the number and names of mining claims, together with the area and the amount deposited to pay for the same, surveyed under the act of Congress approved July 26, 1866, and the amendatory act thereto, approved May 10, 1872.

Statement E, containing the number of townships surveyed during the year ending June 30, 1872, and the area of public land contained in the same.

Statement F, containing the amount of salaries paid the surveyor general and clerks in his office for the year ending June 30, 1872, and incidental expenses for the same period.

Statement G contains an estimate for the surveying service for the year ending June 30, 1874, and the office expenses for the same year.

In this Territory, during the past year, a great number of new discoveries of gold and silver have been made, and large amounts of ore taken out and shipped for treatment, and the mining interests were never in a more prosperous condition than at present. The number of mining claim surveys continues to increase to such an extent that this office, with its present force, can scarcely keep up the work, and from present indications the increase will be still greater.

This Territory is rapidly filling up with settlers, and during the coming year extensive surveys will be required to meet the want of settlers.

The completion and projection of new railroads throughout the different sections of the Territory are rapidly developing the vast resources of Colorado.

The Denver and Rio Grande Railway (narrow guage) is now completed to Pueblo, a distance of one hundred and eighteen miles from Denver, and is being rapidly extended to the coal fields near Canyon City. The Colorado Central Railroad is also completed to a point a few miles from Central City, and will be finished to that point in a short time.

The Kansas Pacific are building a branch from Kit Carson to Fort Lyon, and the Atchison, Topeka and Santa Fé Railroad Company are constructing a road up the Arkansas River, and are now some forty miles below Fort Lyon.

The Platte Valley Railroad is now in course of construction up the Platte Valley from Julesburgh; and other railroads are being projected, all of which are developing the resources of this Territory and rapidly filling it up with settlers.

It affords me no little satisfaction to preface my report with congratulatory expressions of the rapid growth and prosperity of Colorado during the past twelve months. In all departments of industry, in agriculture, in mining, in railway enterprises, increased activity has prevailed, the natural result of a steady and healthy emigration to our Territory.

A comparison of the statistics of the business of this office for the past year will afford gratifying evidence of the energy of our people and the general thrift which has followed their efforts.

The season just closing has been remarkably favorable to the agricultural interests, and farm products are in consequence more abundant and nutritious than ever before.



Timely and copious rains have rendered irrigation almost unnecessary, and vegetation of all kinds has flourished beyond all precedent in this region.

Mining enterprises have been prosecuted within the past year with marked success in Colorado. Many new mines have been discovered and opened, the products of which are very rich in precious metals. It is confidently believed that another season will develop the fact that the mining districts of Colorado cannot be surpassed in any other portion of the continent.

Very respectfully, your obedient servant,

W. H. LESSIG,  
*Surveyor General of Colorado.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*

A.—*Statement of account of surveys made under regular appropriation for the fiscal year ending June 30, 1872.*

Date.	Name of deputy.	Amount.	Appropriation.	Amount.
Aug. 5, 1871	B. M. Whittemore .....	\$1,683 67	By appropriation .....	\$40,000 00
Aug. 16, 1871	E. D. Bright .....	1,157 25		
Aug. 16, 1871	G. W. Phelps .....	1,013 30		
Aug. 31, 1871	G. V. M. Boutelle .....	1,153 50		
Sept. 18, 1871	Oakes & Kellogg .....	1,222 60		
Oct. 2, 1871	R. M. Kidder .....	514 74		
Oct. 13, 1871	F. F. Bruné .....	1,464 40		
Oct. 31, 1871	J. H. Martz .....	6,552 60		
Nov. 18, 1871	George H. Hill .....	5,288 48		
Dec. 13, 1871	A. M. Fabringer .....	6,590 78		
July 16, 1872	W. A. Christian .....	7,813 34		
Feb. 15, 1872	George H. Hill .....	284 97		
Feb. 15, 1872	George H. Hill .....	2,886 22		
July 24, 1872	W. H. Atkinson .....	1,197 75		
Sept. 21, 1872	W. H. Atkinson .....	959 63		
	Balance .....	216 77		
	Total .....	40,000 00	.....	40,000 00

B.—*Statement of account of surveys made under act of March 3, 1871, within the limits of the Kansas Pacific Railroad.*

Aug. 22, 1871	Albert Farmer .....	\$3,595 56	By appropriation .....	\$30,000 00
Sept. 18, 1871	James H. Jones .....	3,396 34		
Sept. 26, 1871	W. H. Atkinson .....	4,201 07		
Oct. 2, 1871	S. N. Adams .....	4,837 40		
Dec. 18, 1871	W. H. Atkinson .....	3,033 81		
Jan. 5, 1872	S. N. Adams .....	3,009 66		
May 15, 1872	James H. Jones .....	4,213 91		
	Balance .....	114 75		
	Total .....	30,000 00	.....	30,000 00

C.—*Statement showing surveys made under act of Congress approved May 30, 1862, and the amendatory act thereto, approved March 3, 1871.*

Aug. 16, 1871	F. J. Stanton .....	\$44 37	By individual deposit.	\$6,681 91
Sept. 12, 1871	B. M. Whittemore .....	557 49		
Sept. 12, 1871	A. R. Hunt, depositor .....	67 51		
Sept. 19, 1871	D. C. Oakes .....	599 82		
Sept. 19, 1871	W. M. Clayton, depositor .....	25 18		
Jan. 22, 1872	B. M. Whittemore .....	600 92		
Feb. 5, 1872	Oakes & Kellogg .....	1,683 07		
Feb. 5, 1872	M. L. De Coursey, depositor .....	116 93		
Feb. 15, 1872	D. C. Oakes .....	817 62		
Feb. 29, 1872	Wm. Ashley .....	600 13		
Feb. 29, 1872	S. La Grange, depositor .....	14 87		
Mar. 12, 1872	Wm. Ashley .....	600 50		
Mar. 12, 1872	E. A. Hall, depositor .....	19 50		
July 17, 1872	F. C. Morse .....	892 20		
July 17, 1872	H. Wales, depositor .....	41 81		
	Total .....	6,681 91	.....	6,681 91



D.—Statement containing the number and names of mining claims, together with the area and amount deposited to pay for the same, surveyed under act approved July 26, 1866, and the amendatory act thereto, approved May 10, 1872.

No. of lode.	Name of lode.	No. of district.	Name of district.	County.	Township.	Area in acres.	Approved.	Character of lode.	Amount deposited.	
									Field.	Office.
124	Star of the West.....	1	Lake.....	Gilpin.....	3 s. 72	2.984	Feb. 17, 1871	Gold and silver.	\$60 00	\$16 00
125	Pewabie.....	1	Russell.....	do.....	3 s. 73	1.494	Feb. 19, 1871	do.....	50 00	16 00
126	do.....	1	do.....	do.....	do.....	1.494	Feb. 19, 1871	do.....	50 00	16 00
127	Helos.....	1	Nevada.....	do.....	do.....	4.362	Aug. 16, 1871	do.....	40 00	16 00
128	Washington City Tunnel.....	1	Gregory.....	do.....	do.....	1.395	Aug. 16, 1871	do.....	50 00	16 00
129	John Jay.....	1	Eureka.....	do.....	do.....	0.937	Aug. 16, 1871	do.....	50 00	16 00
130	Salopian.....	1	Nevada.....	do.....	do.....	0.544	Oct. 2, 1871	do.....	45 00	16 00
131	Motto.....	1	do.....	do.....	do.....	0.229	Oct. 2, 1871	do.....	45 00	16 00
132	Cymro.....	1	do.....	do.....	do.....	0.401	Oct. 2, 1871	do.....	45 00	16 00
133	Alma.....	1	do.....	do.....	do.....	0.229	Oct. 2, 1871	do.....	45 00	16 00
134	Kansas.....	1	do.....	do.....	do.....	0.058	Oct. 2, 1871	do.....	40 00	16 00
135	White Cloud.....	1	Virginia.....	do.....	do.....	1.148	Oct. 2, 1871	do.....	50 00	16 00
136	Noteway.....	1	Lake.....	do.....	do.....	0.893	Aug. 22, 1871	do.....	45 00	16 00
137	Running.....	1	Gregory.....	do.....	3 s. 72	1.033	Oct. 2, 1871	do.....	45 00	16 00
138	Star of the West.....	1	Russell.....	do.....	3 s. 73	2.754	Oct. 2, 1871	do.....	60 00	16 00
139	Mercer County.....	1	Nevada.....	do.....	do.....	0.344	Mar. 19, 1872	do.....	50 00	16 00
140	Missouri.....	1	do.....	do.....	do.....	0.631	Nov. 6, 1871	do.....	50 00	16 00
141	Baker.....	1	do.....	do.....	do.....	0.145	Nov. 6, 1871	do.....	50 00	16 00
142	Indian.....	1	do.....	do.....	do.....	0.002	Nov. 6, 1871	do.....	50 00	16 00
143	Elizabethian.....	1	Central City.....	do.....	do.....	2.011	Nov. 6, 1871	do.....	50 00	16 00
144	Mackie.....	1	Illinois Central.....	do.....	do.....	0.918	Nov. 6, 1871	do.....	55 00	16 00
145	Shaffer.....	1	Nevada.....	do.....	do.....	0.115	Dec. 29, 1871	do.....	45 00	16 00
146	Sudenburg.....	1	do.....	do.....	do.....	0.459	Nov. 6, 1871	do.....	45 00	16 00
147	Martin.....	1	Russell.....	do.....	do.....	4.361	Dec. 29, 1871	do.....	45 00	16 00
148	Helmer.....	1	do.....	do.....	do.....	4.108	Dec. 29, 1871	do.....	45 00	16 00
149	Kokomo.....	1	do.....	do.....	do.....	4.361	Dec. 29, 1871	do.....	45 00	16 00
150	Saratoga.....	1	do.....	do.....	do.....	0.459	Dec. 29, 1871	do.....	45 00	16 00
151	Kansas.....	1	Nevada.....	do.....	do.....	1.148	Feb. 6, 1872	do.....	45 00	16 00
152	Buckeye.....	1	do.....	do.....	do.....	1.148	Feb. 6, 1872	do.....	50 00	16 00
153	Monroe.....	1	do.....	do.....	do.....	0.152	Feb. 6, 1872	do.....	50 00	16 00
154	Burrighs.....	1	do.....	do.....	do.....	0.114	Feb. 7, 1872	do.....	50 00	16 00
155	Continental.....	1	Illinois Central.....	do.....	do.....	1.492	Feb. 7, 1872	do.....	50 00	16 00
156	Searle.....	1	Russell.....	do.....	do.....	2.295	Feb. 7, 1872	do.....	45 00	16 00
157	Winslow.....	1	Illinois Central.....	do.....	do.....	1.148	Feb. 19, 1872	do.....	50 00	16 00
158	Jones and Matteson, Nevada.....	1	Nevada.....	do.....	do.....	0.229	Feb. 19, 1872	do.....	45 00	16 00
159	Louisiana.....	1	Russell.....	do.....	do.....	1.377	Mar. 19, 1872	do.....	50 00	16 00
160	Kansas.....	1	Nevada.....	do.....	do.....	2.460	Feb. 23, 1872	do.....	50 00	16 00
161	Whiting.....	1	Eureka.....	do.....	do.....	2.008	Feb. 7, 1872	do.....	50 00	16 00
162	Meneral.....	1	Nevada.....	do.....	do.....	0.970	Feb. 24, 1872	do.....	50 00	16 00
163	Keystone.....	1	do.....	do.....	do.....	1.085	Feb. 19, 1872	do.....	50 00	16 00
164	Compensation.....	1	Russell.....	do.....	do.....	3.443	Mar. 4, 1872	do.....	40 00	16 00



165	Cowpen	1	do	do	do	3.443	Mar. 19, 1872	do	40 00	16 00
166	Conjunction	1	do	do	do	3.443	Mar. 19, 1872	do	40 00	16 00
167	Bell	1	Illinois Central	do	do	1.570	Mar. 4, 1872	do	45 00	16 00
168	Billings	1	Gregory	do	do	1.148	Mar. 18, 1872	do	45 00	16 00
169	Clifton	1	Russell	do	do	1.602	Feb. 23, 1872	do	40 00	16 00
170	Tigress	1	Illinois Central	do	do	0.459	Mar. 18, 1872	do	45 00	16 00
171	Circassian	1	Mountain House	do	3 s. 72	1.607	May 26, 1872	do	45 00	16 00
174	Burroughs	1	Nevada	do	3 s. 73	0.550	Mar. 18, 1872	do	50 00	16 00
175	Champion	1	do	do	do	1.148	May 26, 1872	do	45 00	16 00
176	Alps	1	Illinois Central	do	do	0.687	May 26, 1872	do	50 00	16 00
177	Trade Wind	1	Mountain House	do	2 s. 72	1.551	May 26, 1872	do	50 00	16 00
56	Count	2	Griffith	Clear Creek	4 s. 74	2.230	Feb. 15, 1871	Silver	50 00	16 00
99	Amazon	2	do	do	do	3.440	July 29, 1871	do	60 00	16 00
100	Major Anderson	2	do	do	do	5.550	Aug. 16, 1871	do	50 00	16 00
101	Scott	2	do	do	do	1.680	Oct. 22, 1871	do	60 00	16 00
102	Silver Plume	2	do	do	4 s. 74	1.600	Oct. 22, 1871	do	50 00	16 00
					4 s. 75					
103	Snider Mill-Site	2	do	do	4 s. 74	1.430	Oct. 22, 1871		50 00	16 00
104	Silver Mountain	2	Upper Union	do	3 s. 74	0.920	Nov. 6, 1871	Silver	50 00	16 00
105	Ebenezer Wilson Mill-Site	2	do	do	do	1.430	Nov. 6, 1871		50 00	16 00
106	New Boston	2	Griffith	do	4 s. 74	0.920	Dec. 29, 1871	Silver	60 00	16 00
107	Mammoth	2	do	do	4 s. 75	0.920	Dec. 29, 1871	do	50 00	16 00
108	Wild Wagoner	2	Morris	do	3 s. 73	3.440	Dec. 29, 1871	Gold and silver	50 00	16 00
109	Victor	2	Idaho	do	do	1.520	Jan. 15, 1872	Silver	60 00	16 00
110	Virgin	2	Griffith	do	4 s. 75	1.580	Jan. 23, 1872	do	55 00	16 00
111	Frostburg	2	do	do	do	1.270	Feb. 1, 1872	do	55 00	16 00
112	Hercules, (resurvey)	2	Queens Griffith	do	do		Feb. 14, 1872	do	75 00	16 00
112	Hercules	2	do	do	do	3.440	June 4, 1872	do	75 00	16 00
113	Owatouna	2	Idaho	do	.733 s	1.600	Feb. 24, 1872	Gold and silver	60 00	16 00
114	Rara Avis	2	do	do	do	1.600	Feb. 24, 1872	do	60 00	16 00
115	National	2	Argentine	do	(*)	3.440	Mar. 19, 1872	Silver	60 00	16 00
116	Captain Wells	2	Griffith	do	4 s. 75	0.730	Apr. 23, 1872	do	60 00	16 00
117	Zeillah	2	do	do	do	3.150	Apr. 29, 1872	do	60 00	16 00
118	Morse	2	do	do	4 s. 74	2.500	Apr. 29, 1872	do	60 00	16 00
					4 s. 75					
119	Albro	2	Morris	do	3 s. 73	0.460	May 3, 1872	Gold and silver	60 00	16 00
120	Federal	2	Griffith	do	4 s. 74	1.290	May 10, 1872	Silver	60 00	16 00
121	Silver Star	2	do	do	do	1.600	May 20, 1872	do	55 00	16 00
122	Count, (resurvey)	2	do	do	do	1.720	June 20, 1872	do	50 00	16 00
123	Lucerne	2	Idaho	do	3 s. 73	3.440	June 28, 1872	do	60 00	16 00
50	Washington	3	Consolidated Montgomery	Park	(*)	3.100	Apr. 1, 1871	Gold and silver	60 00	16 00
51	Dwight	3	do	do	(*)	3.440	Mar. 30, 1872	Silver	30 00	16 00
52	Dudley	3	do	do	(*)	1.840	Mar. 30, 1872	do	30 00	16 00
53	Gill	3	do	do	(*)	2.070	Mar. 30, 1872	do	30 00	16 00
54	Brass	3	do	do	(*)	2.300	Mar. 30, 1872	do	30 00	16 00
37	Caribou	4	Grand Island	Boulder	1 s. 73	1.606	June 27, 1872	Silver	60 00	16 00
38	White Rock	4	Gold Hill	do	1 n. 72	0.918	June 8, 1872	Gold and silver	60 00	16 00
39	Silver Point	4	Grand Island	do	1 s. 73	1.607	June 8, 1872	do	60 00	16 00
40	Boulder County	4	do	do	do	0.631	June 6, 1872	do	60 00	16 00
41	Mammoth	4	do	do	do	1.607	June 6, 1872	do	60 00	16 00

\* Unsurveyed.



E.—Statement showing the number of townships surveyed during the fiscal year ending June 30, 1872, and the area of public land contained in the same.

Township.	Range.	Area, (acres.)	Township,	Range.	Area, (acres.)
11 north	48 west	23, 061. 36	10 south	60 west	22, 926. 11
12 north	48 west	9, 199. 56	11 south	60 west	23, 061. 95
4 north	55 west	23, 075. 47	21 south	60 west	856. 66
5 north	55 west	23, 094. 56	33 south	60 west	23, 109. 18
4 north	56 west	23, 003. 38	2 south	61 west	23, 041. 27
11 north	56 west	23, 085. 83	3 south	61 west	22, 943. 40
12 north	56 west	10, 120. 18	11 south	61 west	23, 163. 11
11 north	57 west	22, 951. 48	21 south	61 west	11, 620. 40
12 north	57 west	10, 353. 28	3 south	62 west	23, 019. 54
11 north	58 west	23, 156. 66	12 south	62 west	22, 949. 85
12 north	58 west	10, 627. 61	21 south	62 west	3, 563. 73
11 north	59 west	23, 142. 77	3 south	63 west	22, 988. 40
11 north	60 west	23, 072. 76	12 south	63 west	23, 248. 63
11 north	61 west	23, 078. 35	13 south	63 west	23, 029. 40
11 north	64 west	23, 109. 93	14 south	63 west	23, 035. 41
44 north	10 east	23, 036. 71	15 south	63 west	23, 055. 03
46 north	9 east	23, 027. 33	16 south	63 west	22, 995. 91
22 south	50 west	23, 167. 31	20 south	63 west	21, 444. 26
22 south	51 west	20, 360. 19	20 south	63 west	633. 03
23 south	52 west	415. 88	21 south	63 west	691. 95
23 south	53 west	4, 420. 04	21 south	63 west	15, 964. 10
9 south	55 west	23, 019. 34	13 south	64 west	23, 156. 61
10 south	55 west	23, 019. 36	14 south	64 west	23, 135. 30
9 south	56 west	23, 090. 64	15 south	64 west	23, 096. 29
10 south	56 west	23, 016. 36	16 south	64 west	23, 063. 78
1 south	57 west	22, 799. 60	17 south	64 west	22, 934. 95
2 south	57 west	22, 914. 90	24 south	64 west	21, 539. 01
4 south	57 west	22, 909. 03	21 south	64 west	442. 47
5 south	57 west	22, 988. 45	21 south	65 west	23, 022. 29
6 south	57 west	23, 219. 44	22 south	65 west	23, 008. 11
7 south	57 west	22, 496. 96	21 south	66 west	22, 922. 84
8 south	57 west	22, 720. 74	22 south	66 west	22, 964. 06
9 south	57 west	22, 858. 30	13 south	67 west	23, 082. 65
10 south	57 west	22, 990. 18	14 south	67 west	15, 839. 00
1 south	58 west	23, 019. 09	21 south	67 west	22, 867. 96
2 south	58 west	23, 050. 75	22 south	67 west	22, 998. 82
3 south	58 west	23, 073. 26	32 south	67 west	22, 890. 83
4 south	58 west	23, 008. 48	33 south	67 west	22, 984. 73
5 south	58 west	23, 048. 94	22 south	68 west	23, 017. 97
6 south	58 west	23, 746. 63	23 south	68 west	23, 272. 42
7 south	58 west	23, 095. 68	24 south	68 west	23, 010. 61
8 south	58 west	23, 072. 96	25 south	68 west	18, 466. 01
9 south	58 west	22, 994. 95	28 south	68 west	23, 080. 20
10 south	58 west	23, 017. 72	30 south	68 west	19, 203. 39
1 south	59 west	23, 168. 56	33 south	68 west	23, 160. 96
2 south	59 west	23, 124. 16	20 south	69 west	23, 287. 95
3 south	59 west	23, 062. 96	23 south	69 west	23, 117. 79
4 south	59 west	22, 975. 61	24 south	69 west	23, 123. 03
5 south	59 west	22, 994. 19	25 south	69 west	23, 127. 81
6 south	59 west	23, 719. 43	28 south	69 west	22, 890. 00
7 south	59 west	23, 002. 88	29 south	69 west	22, 886. 16
8 south	59 west	22, 982. 95	9 south	70 west	23, 038. 98
9 south	59 west	23, 006. 89	18 south	70 west	9, 613. 94
10 south	59 west	23, 010. 43	19 south	70 west	19, 516. 59
13 south	59 west	23, 119. 36	7 south	71 west	23, 045. 72
1 south	60 west	23, 182. 41	20 south	72 west	23, 173. 10
2 south	60 west	23, 042. 88	22 south	72 west	23, 172. 72
3 south	60 west	22, 055. 39	29 south	72 west	21, 311. 32
4 south	60 west	22, 989. 42	1 south	73 west	23, 168. 95
5 south	60 west	23, 007. 60	29 south	73 west	20, 681. 64
6 south	60 west	23, 620. 58	30 south	73 west	23, 079. 55
7 south	60 west	23, 174. 47	5 south	74 west	23, 056. 14
8 south	60 west	23, 111. 34			
9 south	60 west	22, 944. 23			
			Total acres		2, 640, 832. 11



F.—Statement of amount paid surveyor general and clerks in his office for the fiscal year ending June 30, 1872, and incidental expenses for the same period.

Date.	To whom paid.	Amount.	Appropriation.	Amount.
1871. Sept. 30	W. H. Lessig, surveyor general .....	\$750 00	By appropriation of.....	\$7,000 00
	E. M. Ashley, chief clerk .....	450 00	By special deposit on ac-	1,584 00
	Charles Jacobs, draughtsman.....	305 70	count of mining claims.	
	E. W. Cobb, transcribing clerk.....	375 00		
	H. L. Thayer, transcribing clerk.....	69 29		
Dec. 31	W. H. Lessig, surveyor general.....	750 00		
	E. M. Ashley, chief clerk.....	450 00		
	C. Jacobs, draughtsman.....	375 00		
	E. W. Cobb, transcribing clerk.....	375 00		
	.....do.....	40 76		
1872. Mar. 31	W. H. Lessig, surveyor general.....	750 00		
	E. M. Ashley, chief clerk .....	450 00		
	C. Jacobs, draughtsman.....	375 00		
	E. W. Cobb, transcribing clerk .....	375 00		
	J. H. Blakeley, transcribing clerk.....	48 91		
	W. T. McLaughlin, transcribing clerk ..	36 68		
June 30	W. H. Lessig, surveyor general.....	750 00		
	E. M. Ashley, chief clerk.....	450 00		
	C. Jacobs, draughtsman.....	375 00		
	E. W. Cobb, transcribing clerk .....	375 00		
	J. H. Blakeley, transcribing clerk.....	40 96		
	Balance .....	616 70		
	Total.....	8,584 00		8,584 00
	INCIDENTAL EXPENSES.			
1871. Sept. 30	To expenses third quarter, 1871.....	\$513 03	By appropriation of March	\$2,000 00
Dec. 31	To expenses fourth quarter, 1871 .....	408 72	3, 1871.	
1872. Mar. 31	To expenses first quarter, 1872 .....	370 05		
June 30	To expenses second quarter, 1872.....	692 02		
	Balance .....	16 18		
	Total.....	2,000 00		2,000 00

G.—Estimate of appropriation for survey of public land in Colorado for the fiscal year ending June 30, 1874, for salaries of surveyor general and clerks in his office, and incidental expenses for the same period.

For 650 miles of standard lines, at \$15 per mile.....	\$9,750
For 3,000 miles of exterior or township lines, at \$12 per mile .....	36,000
For 7,200 miles of subdivisional lines, at \$10 per mile.....	72,000
	117,750
For salary of surveyor general .....	\$3,000
For salary of chief clerk.....	1,800
For salary of draughtsman.....	1,500
For salary of transcribing clerk.....	1,500
For salary of assistant transcribing clerk.....	1,500
	9,300
For office expenses, rent, stationery, incidental expenses, &c.....	\$2,000

### I.—Report of the surveyor general of Montana.

SURVEYOR GENERAL'S OFFICE,  
Helena, Montana, October 14, 1872.

SIR: I have the honor to transmit herewith, in duplicate, the usual annual report and accompanying map of the Territory, and statements required, to wit:

A. Showing condition of the appropriation for surveys of public lands in Montana for the fiscal year ending June 30, 1872.



B. Showing the amount of special deposits made for field and office work on mining claims in Montana Territory for the fiscal year ending June 30, 1872.

C. Showing list of public lands surveyed in Montana since June 30, 1871.

D. Showing condition of surveys contracted for by the surveyor general of Montana, under appropriation by Congress for the fiscal year ending June 30, 1872.

E. Showing condition of contracts for mineral surveys.

F. Showing the number of township plats, descriptive lists of land, and corners furnished the Helena land office since June 30, 1871.

G. Showing condition of appropriation for clerks in surveyor general's office for the fiscal year ending June 30, 1872.

H. Showing condition of appropriation for salary of surveyor general for the fiscal year ending June 30, 1872.

I. Showing condition of appropriation for the incidental expenses of surveyor general's office for the fiscal year ending June 30, 1872.

J. Showing amount of special deposits made for the survey of public lands in Montana since June 30, 1871.

K. Statement of number of plats made in the office of the surveyor general for Montana during the fiscal year ending June 30, 1872.

L. Showing the amount of land surveyed in Montana.

M. Showing the number of lineal miles run, the rates per mile, and the total cost of surveys in Montana Territory during the fiscal year ending June 30, 1872.

N. Statement giving names, nativity, &c., of surveyor general and clerks in his office for the fiscal year ending June 30, 1872, and to date.

O. Estimate for the surveying service in the district of Montana for the fiscal year ending June 30, 1874.

#### SURVEYS.

The appropriation of \$40,000 for the survey of the public land in this Territory during the last fiscal year was exceeded by the amount of \$736.64. Although my instructions were explicit not to let contracts to exceed the amount placed at my disposal, yet when the returns were footed up, I found the above excess, although the contracts as let only aggregated about \$39,800, thus retaining a balance of \$200 for contingencies. But the sinuous course of the Missouri River caused the meander lines to far exceed the amount estimated in the contracts.

Seymour Nebeker's contract exceeded the estimated amount, by reason of the mountains not projecting into the fractional townships as far as supposed. I am not advised that Congress has passed any deficiency bill to meet the excess above mentioned, although I reported the fact, and asked that such a bill be passed for the relief of the contractors who had performed their work in good faith, which was approved by this office, and returns thereof made to the honorable Commissioner General Land Office. I therefore respectfully urge that steps be taken to secure the passage by Congress of a bill for the above purpose at as early a day as possible.

Meridian and standard lines have been extended and established as follows:

The fifth standard parallel north through ranges three, four, five, and six east. A guide meridian from the fifth standard parallel north between ranges six and seven east, through townships twenty-one, twenty-two, twenty-three, twenty-four, and twenty-five north. The sixth standard parallel north through ranges five, six, seven, and eight east. The fourth standard parallel north through ranges four and five west. The fifth standard parallel north through ranges four, five, six, and seven west. The third standard parallel north in range four east to the mountains. The Deep Creek guide meridian was run south between ranges five and six east, through townships seven and eight north. The second standard parallel north through ranges thirteen and fourteen west. A guide meridian between ranges seven and eight west (by offsets as per plat) through townships nine, ten, eleven, and twelve north. The third standard parallel north through range ten west. The principal meridian was run south through ranges eighteen and nineteen north. The second standard parallel north through range seven west.

In addition to these standard lines, fifty-six townships in the different valleys have been surveyed, and proper returns made of the same to the General Land Office, and proper plats and descriptive lists filed in the Helena land office, as per statement F, herewith inclosed.

#### OFFICE WORK.

During the year there have been drawn in this office (where there was but one regular draughtsman during the whole year) 12 diagrams of standard lines, 36 of township lines, 54 mineral claims, 20 for use of deputy surveyors, 30 of townships made fractional by mineral claims, 168 regular township maps, 1 contract map, and three complete territorial maps, amounting in all to 324 maps. Besides these several other maps and diagrams have been made through courtesy for the use of citizens and certain officers.

During the fiscal year there have been established and perpetuated the following number of linear miles: Standard lines, 118 miles 67 chains 59 links; meridian lines,



66 miles; township lines, 681 miles 47 chains 27 links; section lines, 2,889 miles 22 chains 83 links; meander, 103 miles 56 chains 18 links, amounting in the aggregate to 3,858 miles 33 chains and 87 links.

The notes of these lines as established received a critical examination, and were found to conform with the laws of the United States and the instructions of this office. They were transcribed, and the copies thereof compared closely with the original notes, and transmitted to the General Land Office with the triplicate plats, the original notes and plats being placed on file in this office for future reference for all time to come.

The total cost of the field work of the above surveys is \$40,881.64, and office work \$9,000, making an aggregate amount of \$49,881.64. The total acres surveyed in the Territory during the year is 1,092,974.77, and the cost per acre is a fraction over 4.23 cents per acre, being sixteen hundredths of a cent less per acre than last year. This is accounted for from the fact that there were more exterior and standard lines run in 1871 than in 1872.

The public land surveyed in this district this year will, when sold, bring in a revenue of \$1,366,228.46. The new territorial map made in this office, and which is to accompany this report, will more fully show the extent, direction, and location of the work above mentioned.

On account of the mountains the surveys are very irregular; but they are all properly connected by standard and meridian lines, and projected according to the regular system of public land surveys, the convergency of meridians being allowed for on all correction lines where the correction line could not be run directly from the principal meridian, thus providing for the future survey of the townships falling in the mountain regions, and which are not required to be surveyed at present under special instructions.

The total number of acres surveyed in this Territory since the inception of the public surveys in this district foots up 3,252,693.25, including military reservations and mineral surveys on unsurveyed land, as is shown in Statement L, accompanying this report.

Eighteen final surveys of mineral claims for patent have been made and returned according to law and instructions, an increase of eleven over last year.

The special deposits for field work amounted to only \$70, and the same for office work to \$450 during the year.

On the 1st day of January, 1872, there had been deposited for office work from the time the first deposit was made \$1,113; since that date \$275 have been added to it, increasing the amount to \$1,388 at the end of the fiscal year.

The usual office work required in the general annual duties of making out contracts and bonds for deputy surveyors, special instructions, in duplicate, and recording of same; diagrams, outline maps, and descriptions of lines and corners for guidance for deputies in the field; examination and correction of original field notes of public surveys of agricultural and mineral lands, as they are returned by the deputies; official correspondence and semi-official, and recording same; calculation of areas of fractional lots and the miles run, and the computation of the accounts for the deputy surveyors; the quarterly accounts of the office and recording of same.

This report, to be acceptable to the honorable Commissioner General Land Office, must be as full and complete as possible, and therefore of necessity must consume much of the time of the office in its compilation in triplicate.

Although this report will not give as large a list of statistics as that of last year, yet I shall endeavor to give you as much information as circumstances will allow.

The territorial map required from this office, and which is to accompany this report, has been completed, and I can say that no pains or time have been spared to make its compilation as complete, correct, and full as possible for publication.

The execution of this map and tracing thereof retained in this office is the work of many weeks for one draughtsman, requiring great patience and skill on his part, as well as truthfulness in its projection and delineation of the ever-varying topography of rivers, mountains, creeks, and valleys.

The surveys of this year come in too late to be available in making any corrections on the map without marring its surface too much.

It contains very reliable information of the country as far as known.

The Yellowstone region and National Park were laid down from maps of Professor Hayden, furnished us by Hon. N. P. Langford, superintendent of the park.

#### PROJECTED SURVEYS.

On account of more pressing demands by settlers in other regions, I was unable to extend the lines of the public surveys this year eastward into the Judith Basin and Yellowstone Valleys, the appropriation of \$50,000 not being sufficient for that purpose; therefore those regions and the country adjacent thereto which may be found available will receive attention next season.

There is still open country on the south and north to be surveyed, and I propose to



continue the surveys in the Big Blackfoot, Bitter Root, and Flat Head Valleys, and to extend the lines into Horse Plain country, and as far west as possible.

The construction of the Northern Pacific Railroad will bring thousands of immigrants to our rich Territory, who will settle in our fertile valleys, and wish to obtain titles to their lands and be forever at rest about their homes. This they cannot do unless the public surveys keep pace with the tide of immigration and settlement. To meet the demands thus created my estimate for the surveying service in this district for the next fiscal year will be more likely to fall short than to exceed the amount required. I therefore respectfully urge that my estimate be honored with an appropriation of money equal to the amount asked for.

#### AGRICULTURAL.

Of the 92,016,640 acres of land embraced within the limits of Montana, it is estimated that over one-third can readily be rendered tillable by the construction of the necessary means of irrigation; of the remaining two-thirds, the larger portion, despite the mountain chains and "Bad Lands" presents upon the mountain slopes and elevated plateaus natural pastures of abundant and nutritious grasses for the perpetual grazing of countless herds of domestic as well as wild animals.

Owing to existing natural causes, the rain-fall is so limited, and so little to be depended upon, that artificial means have to be resorted to for the purpose of conveying needed moisture to fields of grain and vegetables.

The winter snows, falling deep upon the mountain-summits, melt but slowly during the spring and summer, giving birth to constant springs and never-failing streams, which, flowing down into the fruitful valleys, are diverted from their channels, and led by means of ditches through the gardens and grain-fields of the farmer.

To husbandmen in the Eastern States, this system of raising crops by irrigation would probably, in their estimation, react against the agricultural interests of the Territory, but to those conversant with its superior and certain advantages, it is far more preferable than depending on the varying and uncertain fall of rain.

While in the States droughts come and stunt and wither up the grain, and the parched earth opens to receive moisture, here the tiller of the soil, when his grain needs water, opens ditches, and, flooding his fields, causes his crops to grow and yield largely and luxuriantly under his attentive care. Again, when a favorable season has blessed eastern farmers with that which is to them an abundant crop, and they go forth with glad-some hearts to harvest it, it sometimes happens that in the midst of their joyous labors the flood-gates of Heaven are opened, and they behold prospective gains greatly diminished, if not entirely lost. Here the rains seldom come during the summer season, and when they do are of short duration and limited extent, so that neither grains nor grasses are injured by it. Here generous Nature grants to the industrious worker of her soil her choicest and most fruitful productions; and so given, she seeks not to rob him of them.

A quarter of a century ago attempts were made by the Jesuits, at their mission in the Bitter Root Valley, to raise vegetables, but they failed to do so, by reason of the lack of knowledge of the important auxiliary afforded by irrigation, but with the introduction of that necessary adjunct to the successful cultivation of the soil, that valley now yields large crops of grain and staple vegetables, which for quality and quantity surpasses sections of country commonly believed to be more naturally adapted for their production. The excitement which led to the peopling of the Territory caused the masses to upturn its verdant soil; not, however, for the food which it might directly yield them, but to gain the golden particles which lay hidden beneath it. Most of the immigrants were too impatient to become suddenly wealthy to seek the more permanent and certain prosperity gained by the methodical and unexciting pursuits of agriculture; still the great scarcity of grain products, together with their high commercial value, led some into this branch of industry, in which their foresight and labor has been well rewarded by the present possession of comfortable homes, large herds of growing stock, and pecuniary means gained more slowly but surely than is generally acquired by placer mining. The constantly diminishing yield of gulch claims causes their workers to seek other pursuits, or to migrate to other points, where new fields are open for following their precarious and too often ill rewarded but self-imposed avocation. This has operated against the more complete development of this material interest of the Territory, inasmuch that while it has increased its number of producers, it has more largely diminished the mining population of consumers. Possessing no practicable means so as to convey surplus agricultural productions remuneratively to outside markets, when sufficient is raised for supplying the wants of its resident population, then farmers will have to devote their attention (as they are even now doing) to the raising of horses and cattle, which will convey themselves to a profitable market. The long and tedious routes of ingress into the Territory, together with a very general deficiency of knowledge among the laboring population of the thickly settled East,



respecting its resources and capacities, has prevented that increase of abiding inhabitants which its superior advantages would have otherwise secured.

Occupying a geographical position far to the westward, yet almost wholly north of that parallel of latitude which forms the northern boundary of the States of New York and Vermont, and extending over a country more than twice as large as the area of those two States combined, its present population does not probably number over 25,000 white inhabitants. Its climate, despite its altitude and northerly location, is not controlled by the thermal lines which pass through the States referred to, but in most respects its valleys possess temperatures similar to those prevailing in Northern Missouri and Southern Pennsylvania. Its agricultural productions principally consist of wheat, potatoes, barley, oats, turnips, cabbages, beets, and kindred vegetables, while corn is raised and ripens in some portions of the Territory; the nights are ordinarily too cool to permit its profitable culture to any considerable extent; for feeding stock, oats and barley are substituted in its place.

#### AGRICULTURAL FAIRS.

At the third annual territorial fair, held near Helena the present autumn, the following well-authenticated yields of cereals and vegetables were entered for and received the offered premiums:

The best acre of wheat yielded 6,120 pounds, or 102 bushels; the best crop of barley yielded  $113\frac{1}{2}$  bushels per acre; the best crop of oats yielded 101 bushels per acre; the best crop of potatoes yielded 613 bushels per acre; the best crop of onions yielded  $398\frac{1}{4}$  bushels per acre.

Other entries were made, showing that while the yields were rather more than ordinary, (probably by reason of extra care,) the production of from sixty to eighty bushels of wheat per acre is by no means of unusual occurrence; still the average yield throughout the Territory is about forty-five bushels to the acre. The fair was a financial success, and was very creditable to the Territory. Although nearly every one of the counties were more or less represented, still three-fourths of the articles were placed on exhibition by the citizens of Lewis and Clarke County. The gross receipts of the association amounted to about \$7,500, leaving a net profit of \$1,000 over the amount expended in the payment of premiums and incidental expenses. A fair of the combined counties in Eastern Montana is now being held at Gallatin City, where the "Three Forks" unite to form the majestic Missouri.

#### STOCK RAISING.

There are comparatively but few sections of our immense country which possess such facilities for the raising of horses, cattle, and sheep as this does. With crystal streams coursing down the mountain sides, and meandering through the grass-covered valleys, water, pure and cool, is always easily accessible by thirsty herds. The foot-hills and mountain sides, with few exceptions, afford abundant pasturage during the summer, while in the winter the comparatively light fall of snow in the valleys usually enables the stock to supply themselves with a sufficient amount of food to come out in tolerably fair condition in the spring. The wild bunch-grass, which ripens in midsummer, becomes sun-cured, and retains its wonderful nutritive qualities, until the recurring season causes its roots to send forth new shoots. The past winter was unusually severe here as well as elsewhere. The snow fell early and to an unusual depth, and remained on the ground much longer than ordinary, so that for many weeks horses and cattle suffered from hunger; but little hay was on hand, and many herds received none at all; yet, by the best information obtainable, it is estimated that not over 2 per cent. of the stock of the Territory perished from starvation. Many of the valleys were singularly free from snow, and cattle wintered in them as usual. Indians and old traders who have resided long in the country report that every ten or twelve years there occurs a winter of unusual severity. Little or no care is taken of the dumb brutes while they supply their own food; they would thrive much better if stabling was constructed by their owners for sheltering them nights and during storms. The cattle are, as a rule, by birth, of an inferior quality, coming from Texas and California, but finer breeds have been more recently imported, so that it is being perceptibly improved. The same is true relative to horses, by far the larger portion being "bronkas," from California, or "cayuses," obtained from Indians. These animals are small, but possess sinewy limbs, enabling them to travel long distances at a rapid pace, but are inferior as draught horses. Many stock growers are engaged in improving their equine animals by the importation of blooded stallions and brood mares from the Eastern States. Considering that the Territory cannot be surpassed for the profitable raising of sheep, it is indeed singular that comparatively so few have been brought into it. The climate is such that the diseases which afflict them elsewhere are unknown here. The wool is of fine quality, and the yield of wool averages more per head than in any other section of the country. Of 1,100 sheep driven into the country from Oregon two years ago, the average weight per fleece last year was five pounds, while this year from



the same flock was five and a half pounds per fleece. Something over forty thousand pounds of wool have been exported from the Territory this year, and the time is not far distant when it will be sent abroad into the markets of the world in the form of cloths, successfully competing with older countries for superior fineness and quality. With the raising of stock is closely connected dairying, only to supply home demands, will, so soon as a railroad is constructed through the country, become a source of much revenue to farmers, for the dairies of Orange, Herkimer, and other celebrated cheese and butter manufacturing counties of the East, do not produce either of better quality in flavor and richness than is ordinarily offered for sale in this market. With the use of a railway and refrigerating cars the stock-raisers of Montana will be able to place in the butchers' stalls of Atlantic cities both beef and mutton, which will become justly famed for its superior quality.

#### MONTANA.

*Geographical.*—Located between the 45th and 49th parallels of latitude, and extending westward from the border of Dakota to the summit of the Cœur de Alene Range, is the Territory of Montana, the name itself indicating its most prominent topographical characteristics. Within its confines head two of America's grand rivers, which, springing from either slope of the great "continental back-bone," course rapidly away from each other, ultimately burying themselves in ocean depths, the one in the warm waters of the Gulf of Mexico, and the other in the colder waves of the Pacific. The elevation of the cultivated valleys ranges from one-half to three-fourths of a mile above the level of the sea, while the quartz and placer mines are found at a still higher altitude. Its numerous mountain ranges are traversed by veins of precious and baser minerals; its valleys are well watered and exceedingly productive; its temperature is such that diseases common to sea-board countries are here comparatively rare; its many magnificent cañons, its beautiful vales, cascades, and cataracts, its crystal streams, thermal springs, and other features, form a country which, for grandeur of scenery, fertility of soil, and healthfulness, is not surpassed, if even equaled, by any other section of the globe.

*Historical.*—This Territory was traversed by Captains Lewis and Clarke early in the present century, in their memorable expedition to the mouth of the Columbia River, and was obtained possession of by the Government, it being embraced in the Louisiana purchase of 1803. A score of years later Captain Bonneville moved through a portion of it, and in 1854, 1855, and 1856, Governor Stevens added much to the information of the world respecting its situation, resources, and climate. Later still (1859-'60) Captain Reynolds, of the Corps of Engineers, accompanied by learned associates, explored portions of the valleys of the Yellowstone, Big Horn, Powder, and Missouri Rivers, with some of their tributaries, thus penetrating some parts of the country which had previously been almost a *terra incognita* to the scientific world, if not to the adventurous traders and trappers who had for years before traversed its streams and scaled its mountains. Until the beginning of the last decade, this vast extent of country was uninhabited, except by nomadic tribes of Indians, attachés of the Northwestern Fur Company, and a few Jesuit missionaries; then the immigration from Colorado, seeking placer mines elsewhere, mostly flowed to the known gold fields of California and Oregon, but a few having heard vague rumors of the former discovery of gulch mines far to the northward in among the Rocky Mountains, turned hitherward, and found rich paying diggings at Bannack, in what was then (1862) a portion of Idaho, but which is now in the southern portion of this Territory. Attracted by the news of this discovery, glowing reports of which were disseminated abroad, new parties came, and other places of almost fabulous wealth were found, drawing from remote sections of country hopeful hearts and willing hands to glean from earth her precious hidden treasures. In May, 1864, the Territory was organized, and during the following winter its first legislature assembled at Bannack. In common with all other new countries, especially mining, this became invested with its due share of ruffianly characters, who were subdued or expelled from the Territory only by the summary measures inaugurated by the respectable portion of the community. Living within our borders are several powerful tribes of Indians, who, although usually hostile, have so far refrained from making a general attack upon our exposed settlements. Occasionally predatory bands sweep down upon detached ranches, and drive away stock, murdering such unfortunate individuals as they may chance to meet. The threatening aspect of Indian affairs in the spring of 1867 induced the then acting governor of the Territory to call into service a battalion of volunteer militia, which, by patrolling exposed frontiers, probably averted an impending war. In the winter of 1869-'70 a military expedition penetrated into the winter quarters of one of the most troublesome bands of Indians, and administered such punishment to them as has since caused them to remain peaceable.

#### THOROUGHFARES.

The situation of this Territory is comparatively isolated. It is only reached by long and toilsome routes; hence its healthy growth has been greatly retarded. From Port-



land, Oregon, during 1866, 1867, and 1868, many goods were shipped, via steamer, on the Columbia River, and from the head of navigation they were transported by pack train, following the general course of the North Fork of that river, and so entering the Territory from its western borders. But little immigration now passes over this route, and but a small amount of goods is now imported from that direction. Since the completion of the Union and Central Pacific Railways, Corinne, Utah Territory, has been one of the chief entrepôts of the Territory, it being the point where merchandise brought for this market is transshipped to regular lines of freight teams, and where immigrants leave the railroad to come here, either by stage or wagon. Before this railroad was constructed wagon trains of goods and travelers from Omaha and San Francisco followed the overland road from either direction to Salt Lake City, and from thence, moving northward, crossed the Rocky Mountains and entered the Territory by the way of Bannack. Probably the larger part of the population and merchandise has been brought to the country by the way of the Missouri River. Leaving Saint Louis early in the spring and passing up that stream, the steamer received freights and passengers at different points, and usually reached Fort Benton after a long and tedious passage of over 3,000 miles. In summer the water becomes low, and the presence of bars and rapids in the upper portion of the river prevents the passage of large steamers over them, but boats of moderate draught can reach the mouth of the Musselshell, it is claimed, at any time during the summer months. During the early years of the Territory an annual train of emigrants left Minnesota, and, crossing the plains of Dakota, passed up the northern side of the Missouri and entered the inhabited portion of the Territory by Fort Benton and Sun River. But this route, owing to its length, and the presence of unfriendly Indians along it, has been abandoned for several years. The routes named have been, and now are, the main ones by which the Territory receives its supplies.

#### MINERALOGICAL.

In the several mountain-chains, with their projecting spurs and outlying foot-hills, are found rich outcroppings of the ores of the precious and base metals, which are usually found associated together in a greater or less degree. Some lodes contain in their ores chemical combinations of nearly all of the more generally known metals, while others hold within their walls but few of the minerals associated with each other. The existence of the most valuable mineral in a lode usually determines its mineralogical classification among miners and prospectors, as well as others. Outside of gold, silver, and copper, none of the minerals are found in a metallic state, and the two last named only in very limited quantities, and then more or less alloyed with each other. Gold is found in placers and in quartz veins, while silver, copper, iron, lead, zinc, antimony, and some of the other minor metals have been discovered in many sections of the Territory existing in large and well-defined ledges.

#### PLACER MINES.

Since the first discovery of gold on Gold Creek, in Deer Lodge County, and the later discovery of its existence in considerable quantities at Bannack, in 1862, and which led to the settlement and formation of the Territory, other placers of greater richness have been found, and yielding up a portion of their treasures, have, so to speak, paid so largely, as during "the flush" years embraced in the period extending from 1864 to 1869. No new placers of any considerable extent have been discovered during the last two years, although it is but reasonable to suppose that many undiscovered ones exist. Some portions of the country have not been prospected at all, while others have been, as it were, barely "skimmed over." Comparatively extensive sections are known to contain gold, but it is distributed in such minute quantities through the gravel that it would not justify miners in constructing ditches and devoting time to obtain it, with the existing prices of labor and provisions. In some localities mines are believed to exist, but owing to their probable great depth, and the consequent expense which must necessarily be incurred ere "the pay streak" is reached, those who have both the time and means at their command do not feel disposed to hazard the loss of the one or the waste of the other.

Owing to the unusual lateness of the spring, and opening of the mining season this year, together with the scarcity of laborers, it is impossible that the amount of gold obtained will equal that of previous years. Carefully prepared estimates place the total yield of gold from placers in this Territory, up to the present, at about \$130,000,000, although many claim that its production has been much greater.

The time is sure to come, at no distant day, when the known auriferous gulches will become exhausted, or cease to be remunerative, and then the country will have to depend for its permanent prosperity upon the sure and abundant wealth which will follow the complete development of its superior agricultural resources, and the systematic working of its extensive mineral-bearing ores.



## QUARTZ MINES AND MINING.

*Gold.*—Owing to the excitement which has existed in this Territory, as well as elsewhere, relative to silver-bearing quartz, but little work has been done during the past year in opening the many gold-bearing lodes scattered throughout the Territory. Labor, however, has been very generally prosecuted in those ledges which were known to contain gold in paying quantities, and which were in a forward state of development, ere this argentiferous fever attacked prospectors and quartz speculators. Owing to the high prices paid by placer owners to laborers, work on quartz veins and the milling of ores become very greatly lessened during the summer months; this is caused by the inability and disinclination of mine and mill owners generally to pay the increased wages. Quartz mines and mills are run under greatly increased expenses in the summer over those incurred at other seasons of the year. The Whitlatch Union lode, near Helena, has sustained its well-known reputation for a plentiful yield of gold, while the Keating and Blacker mill, in Jefferson County, has turned out more gold bullion during the past summer than any of the other mills that have been run during that period. The total number of gold mills in the Territory (as near as can now be ascertained) is about thirty, containing from five to thirty stamps each, the aggregate number reaching to nearly or quite five hundred. It is exceedingly difficult to estimate the amount of gold retort produced by these mills, as their owners usually are very reticent about the matter, but it is probably safe to say that the total yield of gold from this source to date has not exceeded \$10,000,000.

*Silver.*—During the first few years of the existence of the Territory the attention of its prospectors was almost entirely absorbed in seeking placer claims, and sometimes in discovering gold-bearing lodes. Although silver ledges were found and recorded, still there were but few who took any interest in their development. Some attempts were made to extract the metal from the ore, but usually failed to do so profitably by reason of the use of improper machinery, or inexperience in the right methods of treatment. It was not until the mines of Utah and Nevada kindled a silver excitement there, which, extending to this Territory over a year ago, caused prospectors to scour the hills in search of new ledges. New districts were organized and abandoned ones revisited and re-established; old locations were re-opened; smelting works were erected and several mills constructed, while the people have universally awakened to the fact that in this branch of mining industry Montana possesses elements which, when needed capital, proper machinery, and cheap transportation are at her command, will cause her annually increasing production of silver bullion to add largely to the monetary wealth of the country. During the past summer smelting works have been running with fair success on argentiferous galena ores at Helena, Jefferson, and Argenta, the former on ores from the Legal Tender, North Pacific, and other lodes. It is claimed that the galena of the first named lode contains a larger percentage of silver than any other of *like class* in the Territory. At Phillipsburgh, in the pioneer silver district of the country, the Saint Louis mill has been running nearly all summer on the rich but base ores of the Speckled Trout mine, producing large quantities of silver bullion. There are now in the Territory six smelting works and four silver mills, containing in the aggregate but twenty-six stamps. The production of silver in this Territory to date, owing to the comparatively recent beginning of the business, has not exceeded \$500,000.

*Copper.*—Ledges of copper ores are found in several portions of the country, containing a considerable percentage of that useful metal. But one attempt has ever been made to reduce them to a metallic state, which, while successful, was abandoned by reason of the then large expense attending its reduction. There is a small stream in the Territory which, holding copper in solution, precipitates it on iron utensils left in the water.

*Iron.*—Large quantities of iron ores in their several natural conditions are found in many districts, but no attempt has yet been made to utilize them. As immense beds of lignite and some bituminous coal are known to exist in nearly every county in the Territory, it is highly probable that at no distant day iron mining and smelting will become one of the profitable industries of the people.

*Other ores.*—"Bog" or "book" tin ore is found near Helena, in small quantities. Cinnabar of an inferior quality is said to exist in the Territory, while zinc is found associated with many galena ores, while antimony is found in many silver-bearing lodes.

Sulphur exists in large quantities near the Yellowstone, but no salt springs or fields have yet been found in the Territory.

Agates, sapphires, garnets, opals, topazes, and rubies are found in sections of the Territory, some of which have been found of very fair quality.

With its fertile valleys and mineral-bearing mountains, with its supply of timber and coal, with its water privileges and healthy climate, all that Montana needs to develop its vast natural resources is capital and railways, and then she will speedily become a great and prosperous State.

Very respectfully, your obedient servant,

JOHN E. BLAINE,  
Surveyor General for Montana.



## A.—Statement of condition of appropriation for surveys of public lands in Montana for fiscal year ending June 30, 1872.

DR.				CR.		
No. of contract.	Date of account.	Contractors.	Amount.	Date.		Amount.
32	July 31, 1871	To Benj. F. and J. M. Marsh	\$2, 129 13	Mar. 3, 1871	By appropriation	\$40, 000 00
33	Aug. 15, 1871	To Seymour Nebeker.....	1, 576 65	July 14, 1871	By certificate of	20 00
32	Aug. 18, 1871	To Benj. F. and J. M. Marsh	1, 845 48		deposit No. 453.	
36	Sept. 1, 1871	To W. W. Johnson and W. H. Baker.	2, 946 60	April 23, 1872	By certificate of	125 00
33	Sept. 6, 1871	To Seymour Nebeker.....	742 94	Jan. 30, 1872	deposit No. 648.	
32	Sept. 9, 1871	To Benj. F. and J. M. Marsh	3, 767 24		By balance.....	736 64
36	Sept. 26, 1871	To W. W. Johnson and W. H. Baker.	2, 425 40			
36	Oct. 6, 1871	.....do.....	95 17			
38	Sept. 29, 1871	To W. H. Baker.....	1, 636 01			
33	Oct. 14, 1871	To Seymour Nebeker.....	2, 799 66			
39	Oct. 19, 1871	To W. Y. Smith.....	20 00			
32	Oct. 11, 1871	To Benj. F. and J. M. Marsh	2, 210 64			
37	Oct. 24, 1871	To Tilford M. Boyd.....	1, 887 29			
34	Oct. 28, 1871	To W. T. McFarland.....	1, 551 33			
35	Nov. 25, 1871	To W. W. de Lacy.....	2, 422 18			
34	Dec. 1, 1871	To W. T. McFarland.....	3, 507 33			
37	Dec. 12, 1871	To Tilford M. Boyd.....	1, 826 35			
37	Dec. 12, 1871	.....do.....	1, 965 84			
40	Dec. 12, 1871	To Benjamin F. Marsh.....	1, 275 05			
33	Jan. 2, 1872	To Seymour Nebeker.....	598 85			
40	Jan. 2, 1872	To Benjamin F. Marsh.....	137 79			
40	Jan. 2, 1872	.....do.....	1, 269 24			
35	Jan. 6, 1862	To W. W. de Lacy.....	2, 120 47			
41	May 4, 1872	To Thomas C. Bailey.....	125 00			
			40, 881 64			40, 881 64

JOHN E. BLAINE,  
Surveyor General for Montana.



B.—Statement of special deposits made for field and office work on mining claims in Montana Territory for the fiscal year ending June 30, 1872.

Name of deputy.	Date of contract.	Name of depositor.	Amount of deposit.			Date of C. D.	No.	Location of work.
			Field work.	Office work.	Total.			
George B. Foote .....	Mar. 18, 1868	S. D. McCombs & Co.....		\$25	\$25	July 7, 1871	449	Lot No. 41, township 9 north, range 4 west.
John L. Corbett.....	Mar. 18, 1868	P. V. Jackson .....		25	25	Aug. 8, 1871	478	Lot No. 37, townships 2 and 3 south, range 2 west.
George B. Foote .....	Mar. 18, 1868	John F. Wilson.....		25	25	Aug. 10, 1871	479	Lot No. 37, townships 8 and 9 north, range 5 west.
John L. Corbett.....	Mar. 18, 1868	Hyde, Hall & Co.....	\$30	25	55	Aug. 18, 1871	483	Lot No. 37, township 1 north, range 1 west.
W. W. Johnson*.....	Mar. 18, 1868	Helly & Pemberton .....		25	25	Sept. 15, 1871	508	Lot No. 37, township 5 north, range 10 west.
John L. Corbett.....	Mar. 18, 1868	Montana Fluming and Mining Co.....		25	25	Nov. 2, 1871	545	Lot No. 37, township 6 south, range 4 west.
George B. Foote .....	Mar. 18, 1868	S. H. Bohen.....		25	25	Dec. 30, 1871	583	Lot No. 37 A and B, township 6 south, range 10 west.
Do .....	Mar. 18, 1868	Taylor & Smith.....		25	25	Jan. 4, 1872	587	Lot No. 42, township 9 north, range 4 west.
Do .....	Mar. 18, 1868	Lewis & Reece .....		25	25	Jan. 12, 1872	590	Lot No. 37 A and B, township 7 north, range 1 west.
Do .....	Mar. 18, 1868	James Winscott .....		25	25	Jan. 19, 1872	595	Lot No. 38, township 9 north, range 3 west.
Do .....	Mar. 18, 1868	Thomas J. Lowry.....	40	25	65	Feb. 1, 1872	607	Lot No. 37 A and B, township 7 north, range 4 west.
Do .....	Mar. 18, 1868	McDermott & Rouan .....		25	25	Feb. 1, 1872	610	Lot No. 37, township 6 north, range 7 west.
Do .....	Mar. 18, 1868	W. G. Preuitt <i>et al.</i> .....		25	25	Feb. 23, 1872	617	Lot No. 43, townships 9 and 10 north, range 4 west.
Do .....	Mar. 18, 1868	Wilkinson Mining Company.....		25	25	Mar. 9, 1872	627	Lot No. 44, township 9 north, range 4 west.
Do .....	Mar. 18, 1868	E. D. Young <i>et al.</i> .....		25	25	Apr. 29, 1872	653	Lot No. 39, township 9 north, range 3 west.
Do .....	Mar. 18, 1868	James E. Hall <i>et al.</i> .....		25	25	June 1, 1872	674	Lot No. 37, township 10 north, range 9 east.
Do .....	Mar. 18, 1868	R. Lawrence and W. S. Paynter.....		25	25	June 25, 1872	684	Lot No. 38, township 10 north, range 6 west.
Do .....	Mar. 18, 1868	Hagadorn, Higgins & Davis .....		25	25	June 25, 1872	686	Lot No. 37, township 10 north, range 6 west.
Aggregate amount deposited during the year .....			70	450	520			

\*Local surveyor.

JOHN E. BLAINE,  
Surveyor General for Montana Territory.



C.—A list of public lands surveyed in Montana Territory during the fiscal year ending June 30, 1872.

No. of township surveyed.	Township.	Range.	Public lands surveyed.	A.	B.	C.	Total.	Remarks.
				Military reservation.	Unsurveyed mountain land.	River.		
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	
1	23 north.	4 east..	22,861.58	.....	.....	.....	22,861.58	
2	23 north.	5 east..	22,950.24	.....	.....	.....	22,950.24	
3	23 north.	6 east..	22,131.30	.....	.....	480.97	22,612.27	
4	24 north.	5 east..	22,910.02	.....	.....	.....	22,910.02	
5	24 north.	6 east..	22,899.70	.....	.....	.....	22,899.70	
6	25 north.	7 east..	22,944.87	.....	.....	.....	22,944.87	
7	25 north.	8 east..	22,949.62	.....	.....	.....	22,949.62	
8	21 north.	3 east..	22,974.19	.....	.....	.....	22,974.19	
9	22 north.	3 east..	22,785.84	.....	.....	.....	22,785.84	
10	22 north.	4 east..	22,897.95	.....	.....	.....	22,897.95	
11	22 north.	5 east..	22,607.64	.....	.....	160.84	22,768.48	
12	3 north.	4 west..	13,475.05	.....	9,564.95	.....	23,040.00	
13	4 north.	4 west..	13,251.81	.....	9,788.19	.....	23,040.00	
14	5 south.	8 west..	22,949.81	.....	.....	.....	22,949.81	
15	6 south.	9 west..	22,893.49	.....	.....	.....	22,893.49	
16	7 south.	10 west..	22,890.10	.....	.....	.....	22,890.10	
17	4 south.	7 west..	23,017.39	.....	.....	.....	23,017.39	
18	1 north.	1 west..	23,000.43	.....	.....	.....	23,000.43	
19	2 north.	1 west..	22,800.02	.....	.....	.....	22,800.02	
20	4 north.	2 west..	22,486.95	.....	.....	.....	22,486.95	
21	21 north.	6 west..	23,028.93	.....	.....	.....	23,028.93	
22	20 north.	5 west..	23,095.48	.....	.....	.....	23,095.48	
23	20 north.	6 west..	22,990.38	.....	.....	.....	22,990.38	
24	20 north.	7 west..	23,072.67	.....	.....	.....	23,072.67	
25	7 north.	6 east..	22,927.12	.....	.....	.....	22,927.12	
26	8 north.	6 east..	22,949.50	.....	.....	.....	22,949.50	
27	9 north.	6 east..	23,016.56	.....	.....	.....	23,016.56	
28	9 north.	4 east..	10,992.13	.....	12,029.15	.....	23,021.28	
29	10 north.	4 east..	22,570.68	400.00	.....	.....	22,970.68	} Camp Baker } military res- } ervation.
30	11 north.	4 east..	21,023.54	2,000.00	.....	.....	23,023.54	
31	12 north.	4 east..	11,514.28	.....	11,500.28	.....	23,014.56	
32	7 north.	10 west..	19,586.97	.....	3,125.20	.....	22,712.17	
33	7 north.	8 west..	9,239.18	.....	13,800.82	.....	23,040.00	
34	8 north.	8 west..	17,887.52	.....	5,152.48	.....	23,040.00	
35	9 north.	11 west..	15,802.78	.....	7,237.22	.....	23,040.00	
36	9 north.	12 west..	11,983.04	.....	11,038.72	.....	23,021.76	
37	9 north.	13 west..	23,036.54	.....	.....	.....	23,036.54	
38	10 north.	11 west..	23,070.39	.....	.....	.....	23,070.39	
39	10 north.	12 west..	23,015.52	.....	.....	.....	23,015.52	
40	10 north.	10 west..	16,209.13	.....	6,760.00	.....	22,969.13	
41	19 north.	1 east..	22,569.59	.....	.....	394.19	22,963.78	
42	19 north.	2 east..	21,236.80	.....	.....	1,442.56	22,679.36	
43	19 north.	3 east..	21,347.03	.....	.....	1,573.69	22,920.72	
44	20 north.	1 east..	22,937.80	.....	.....	.....	22,937.80	
45	20 north.	2 east..	22,965.24	.....	.....	.....	22,965.24	
46	20 north.	3 east..	21,862.62	.....	.....	1,193.67	23,056.29	
47	9 north.	7 west..	4,797.81	.....	18,240.00	.....	23,037.81	
48	9 north.	8 west..	23,053.55	.....	.....	.....	23,053.55	
49	9 north.	9 west..	23,044.72	.....	.....	.....	23,044.72	
50	1 north.	6 east..	*4,072.28	.....	18,967.72	.....	23,040.00	Eighty acres surveyed this year.
51	8 north.	1 west..	5,417.32	.....	17,622.68	.....	23,040.00	
52	12 north.	5 west..	20,525.33	.....	2,277.70	.....	22,803.03	
53	11 north.	5 west..	11,934.02	.....	11,285.98	.....	23,220.00	
54	7 south.	4 west..	14,079.17	.....	8,870.00	.....	22,949.17	
55	8 south.	4 west..	16,835.95	.....	6,221.77	.....	23,057.72	
56	9 south.	4 west..	15,697.48	.....	7,280.00	.....	22,977.48	
Aggregate.....			1,096,967.05	2,400.00	180,762.86	5,245.92	1,285,375.83	
Previously returned.....			3,992.28	.....	19,047.72	.....	23,040.00	
Total.....			1,092,974.77	2,400.00	161,715.14	5,245.92	1,262,335.83	

\* Township returned per previous report, the area of which is changed by subsequent survey.

JOHN E. BLAINE,  
Surveyor General for Montana Territory.



D.—Statement showing condition of the public surveys contracted for by United States surveyor general of Montana, under appropriation by Congress, for the fiscal year ending June 30, 1872.

Contract.		Character and location of work.	Names of deputies.	Remarks.
No.	Date.			
32	1871. May 17 ...	The fifth standard parallel north, through ranges 3, 4, 5, and 6 east; a guide meridian from the fifth standard parallel north, between ranges 6 and 7 east, through townships 21, 22, 23, 24, and 25 north. The sixth standard parallel north, through ranges 5, 6, 7, and 8 east; the exterior boundaries of townships 21 and 22 north, ranges 3, 4, 5, and 6 east, and township 25 north, range 6 east; the exterior subdivision and meander lines of township 23 north, ranges 4, 5, and 6 east; township 24 north, ranges 5 and 6 east, and township 25 north, ranges 7 and 8 east; the subdivisional and meander lines of township 21 north, range 3 east, and township 22 north, ranges 3, 4, and 5 east of the principal meridian.	Benjamin F. Marsh and John M. Marsh.	Completed and returns made.
33	May 18 ...	The exterior and subdivisional lines of fractional townships 3 and 4 north, range 4 west; township 5 south, range 8 west; township 6 south, range 9 west; township 7 south, range 10 west; township 4 south, range 7 west, and subdivision lines of townships 1 and 2 north, range 1 west, and township 4 north, range 2 west of the principal meridian.	Seymour Nebeker.....	Do.
34	May 18 ...	The fourth standard parallel north, through ranges 4 and 5 west. The fifth standard parallel north, through ranges 4, 5, 6, and 7 west; the exterior lines of townships 17, 18, 19, 20, and 21 north, range (No. 5) 5 west, and the exterior lines of township 19 north, ranges 6 and 7 west; the exterior lines of township 21 north, range 7 west; the exterior and subdivision lines of township 20 north, ranges 5, 6, and 7 west, and exterior and subdivision lines of township 21 north, range 6 west, and the exterior lines of townships 17, 18, 19, 20, and 21 north, range 4 west of the principal meridian.	William T. McFarland..	Do.
35	May 19 ...	The third standard parallel through range 4 east; the Deep Creek guide meridian south, between ranges 5 and 6 east, through townships 7 and 8 north; the exterior and subdivision lines of townships 7, 8, and 9 north, range 6 east; townships 9, 10, 11, and 12 north, range 4 east of the principal meridian.	Walter W. DeLacy .....	Do.
36	May 20 ...	The subdivisional lines of townships 7 and 8 north, range 10 west; the exterior and subdivision lines of township 9 north, ranges 11, 12, and 13 west, and 7 and 8 north, range 8 west; second standard parallel north, through ranges 13 and 14 west; the exterior and subdivisional lines of township 10 north, ranges 10, 11, and 12 west; a guide meridian between ranges 7 and 8 west; through townships 9, 10, 11, and 12 north, and the third standard parallel north, through ranges 8, 9, and 10 west of the principal meridian.	Walter W. Johnson and William H. Baker.	Do.
37	June 20...	The principal meridian south through townships 18 and 19 north, exterior subdivision and meander lines of townships 19 and 20 north, ranges 1, 2, and 3 east, and exterior lines of township 18 north, range 1 east of the principal meridian.	Tilford M. Boyd.....	Do.
38	June 19...	The second standard parallel north, through range 7 west, and the exterior and subdivision lines of township 9 north, in ranges 7, 8, and 9 west of the principal meridian.	William H. Baker.....	Do.



## D.—Statement showing condition of the public surveys in Montana, &amp;c.—Continued.

Contract.		Character and location of work.	Names of deputies.	Remarks.
No.	Date.			
39	1871. Aug. 19...	The fractional section line between sections 9 and 16, in township 1 north, range 6 east of the principal meridian.	William Y. Smith.....	Completed and returns made.
40	Sept. 20...	The exterior lines of township 12 north, range 4 west; exterior and subdivision lines of township 12 north, range 5 west; township 11 north, range 5 west, and of fractional townships 7, 8, and 9 south, range 4 west of the principal meridian.	Benjamin F. Marsh.....	Do.
41	1872. May 4....	The subdivision lines of fractional township 8 north, range 1 west of the principal meridian.	T. C. Bailey .....	Do.

JOHN E. BLAINE,  
Surveyor General for Montana.

## E.—Statement showing condition of contracts made for survey of mineral lands in Montana under acts of Congress of July 26, 1866, and July 9, 1870, for the fiscal year ending Jun 30, 1872.

Contract.		Name of deputy.	No. of district.	Extent of district.	No. of final surveys made.	Remarks.
No.	Date.					
4	Mar. 18, 1868	George B. Foote...	2	Counties of Lewis and Clarke, Jefferson, Meagher, Chouteau, Deer Lodge, Missoula, and Beaver Head.	14	Beaver Head County attached to second district since last report.
6	Mar. 18, 1868	Jno. L. Corbett....	1	Counties of Big Horn, Gallatin, and Madison.	3	Work executed by "local surveyor" under private contract.
		W. W. Johnson...	2	Local .....	1	
				Total.....	18	

JOHN E. BLAINE,  
Surveyor General for Montana.



F.—Statement showing the description of land for which township plats and descriptive lists have been furnished the Helena land office, at Helena, Montana, during the fiscal year ending June 30, 1872.

Number.	Township.	Range.	Area.	Duplicate plats, when transmitted.	Descriptive lists, when transmitted.
1	21 north.....	3 east.....	22, 974. 19	August 1, 1871 .....	August 1, 1871.
2	22 north.....	3 east.....	22, 785. 84	August 1, 1871 .....	August 1, 1871.
3	22 north.....	4 east.....	22, 897. 95	August 19, 1871 .....	August 19, 1871.
4	22 north.....	5 east.....	22, 607. 64	August 19, 1871 .....	August 19, 1871.
5	6 south.....	9 west.....	22, 893. 49	August 22, 1871 .....	August 22, 1871.
6	7 south.....	10 west.....	22, 890. 10	September 2, 1871 .....	September 2, 1871.
7	9 north.....	13 west.....	23, 036. 54	September 2, 1871 .....	September 2, 1871.
8	7 north.....	10 west.....	19, 586. 97	September 2, 1871 .....	September 2, 1871.
9	8 north.....	8 west.....	17, 887. 52	September 2, 1871 .....	September 2, 1871.
10	7 north.....	8 west.....	9, 239. 18	September 2, 1871 .....	September 2, 1871.
11	9 north.....	11 west.....	15, 802. 78	September 2, 1871 .....	September 2, 1871.
12	9 north.....	12 west.....	11, 983. 04	September 2, 1871 .....	September 2, 1871.
13	5 south.....	8 west.....	22, 949. 81	September 7, 1871 .....	September 7, 1871.
14	23 north.....	4 east.....	22, 861. 58	September 11, 1871 .....	September 11, 1871.
15	23 north.....	5 east.....	22, 950. 24	September 11, 1871 .....	September 11, 1871.
16	24 north.....	5 east.....	22, 910. 02	September 11, 1871 .....	September 11, 1871.
17	24 north.....	6 east.....	22, 899. 70	September 11, 1871 .....	September 11, 1871.
18	10 north.....	10 west.....	16, 209. 13	September 26, 1871 .....	September 26, 1871.
19	10 north.....	11 west.....	23, 070. 39	September 26, 1871 .....	September 26, 1871.
20	10 north.....	12 west.....	23, 015. 52	September 26, 1871 .....	September 26, 1871.
21	9 north.....	7 west.....	4, 797. 81	September 29, 1871 .....	September 29, 1871.
22	9 north.....	8 west.....	23, 053. 55	September 29, 1871 .....	September 29, 1871.
23	9 north.....	9 west.....	23, 044. 72	September 29, 1871 .....	September 29, 1871.
24	23 north.....	6 east.....	22, 131. 30	October 11, 1871 .....	October 11, 1871.
25	25 north.....	7 east.....	22, 944. 87	October 11, 1871 .....	October 11, 1871.
26	25 north.....	8 east.....	22, 949. 62	October 11, 1871 .....	October 11, 1871.
27	4 south.....	7 west.....	23, 017. 39	October 17, 1871 .....	October 17, 1871.
28	3 north.....	4 west.....	13, 475. 05	October 17, 1871 .....	October 17, 1871.
29	4 north.....	4 west.....	13, 251. 81	October 17, 1871 .....	October 17, 1871.
30	1 north.....	1 west.....	23, 000. 43	October 17, 1871 .....	October 17, 1871.
31	2 north.....	1 west.....	22, 800. 02	October 17, 1871 .....	October 17, 1871.
32	1 north.....	6 east.....	*4, 072. 28	October 19, 1871 .....	October 19, 1871.
33	19 north.....	1 east.....	22, 569. 59	October 31, 1871 .....	October 31, 1871.
34	20 north.....	1 east.....	22, 937. 80	October 31, 1871 .....	October 31, 1871.
35	7 north.....	6 east.....	22, 927. 12	November 25, 1871 .....	November 25, 1871.
36	8 north.....	6 east.....	22, 949. 50	November 25, 1871 .....	November 25, 1871.
37	9 north.....	6 east.....	23, 016. 56	November 25, 1871 .....	November 25, 1871.
38	20 north.....	5 west.....	23, 095. 48	November 30, 1871 .....	November 30, 1871.
39	20 north.....	6 west.....	22, 990. 38	November 30, 1871 .....	November 30, 1871.
40	20 north.....	7 west.....	23, 072. 67	November 30, 1871 .....	November 30, 1871.
41	21 north.....	6 west.....	23, 028. 93	November 30, 1871 .....	November 30, 1871.
42	19 north.....	2 east.....	21, 236. 80	December 16, 1871 .....	December 16, 1871.
43	20 north.....	2 east.....	22, 965. 24	December 16, 1871 .....	December 16, 1871.
44	11 north.....	5 west.....	11, 934. 02	December 26, 1871 .....	December 26, 1871.
45	12 north.....	5 west.....	20, 525. 33	December 26, 1871 .....	December 26, 1871.
46	19 north.....	3 east.....	21, 347. 03	December 26, 1871 .....	December 26, 1871.
47	20 north.....	3 east.....	21, 862. 62	December 26, 1871 .....	December 26, 1871.
48	7 south.....	4 west.....	14, 079. 17	January 2, 1872 .....	January 2, 1872.
49	8 south.....	4 west.....	16, 835. 95	January 2, 1872 .....	January 2, 1872.
50	9 south.....	4 west.....	15, 697. 48	January 2, 1872 .....	January 2, 1872.
51	4 north.....	2 west.....	22, 486. 95	January 2, 1872 .....	January 2, 1872.
52	9 north.....	4 east.....	10, 992. 13	January 9, 1872 .....	January 9, 1872.
53	10 north.....	4 east.....	22, 570. 68	January 9, 1872 .....	January 9, 1872.
54	11 north.....	4 east.....	21, 023. 54	January 9, 1872 .....	January 9, 1872.
55	12 north.....	4 east.....	11, 514. 28	January 9, 1872 .....	January 9, 1872.
56	8 north.....	1 west.....	5, 417. 32	May 24, 1872 .....	May 24, 1872.

Aggregate brought down..... 1, 096, 967. 05 acres.  
Previously reported..... 3, 992. 28 acres.

Total..... 1, 092, 974. 77 acres.

\* Township returned per previous report, the area of which is changed by subsequent surveys.

JOHN E. BLAINE,  
Surveyor General for Montana Territory.



G.—Statement showing the condition of the appropriation for the clerks in the office of surveyor general of Montana for the fiscal year ending June 30, 1872.

DR.			CR.		
1871.			1871.		
Sept. 30	T. C. Bailey, chief clerk .....	\$450 00	Mar. 3	By appropriation .....	\$4,000 00
	George F. Marsh, draughtsman .....	375 00			
	Henry C. Rohleder, clerk .....	216 03			
Dec. 31	T. C. Bailey, chief clerk .....	450 00			
	George F. Marsh, draughtsman .....	375 00			
	Henry C. Rohleder, clerk .....	375 00			
1872.					
Mar. 31	T. C. Bailey, chief clerk .....	450 00			
	George F. Marsh, draughtsman .....	247 25			
	Henry C. Rohleder, clerk .....	239 01			
June 30	Henry C. Rohleder, draughtsman ..	123 63			
	T. C. Bailey, chief clerk .....	440 10			
	George F. Marsh .....	251 37			
		3,992 39			
	Balance .....	7 61			
		4,000 00			4,000 00

JOHN E. BLAINE,  
Surveyor General.

H.—Statement showing the condition of appropriation for salary of surveyor general of Montana for the fiscal year ending June 30, 1872.

DR.			CR.		
Sept. 30, 1871	John E. Blaine .....	\$750	Mar. 3, 1871	Appropriation .....	\$3,000
Dec. 31, 1871	.....do .....	750			
Mar. 31, 1872	.....do .....	750			
June 30, 1872	.....do .....	750			
		3,000			3,000

JOHN E. BLAINE,  
Surveyor General for Montana.



## I.—Statement showing condition of appropriation for incidental expenses for office of surveyor general of Montana for fiscal year ending June 30, 1872.

DR.			CR.		
1871.			1871.		
Aug. 14	To M. R. Delay, desk and repairs...	\$36 00	March 3	By appropriation .....	\$2,000 00
Aug. 23	T. C. Bailey, incidentals .....	24 00			
Sept. 22	Benj. F. French, stationery.....	18 67			
Sept. 30	T. C. Bailey, incidentals .....	46 05			
Sept. 30	Tootle, Leach & Co., carpet.....	18 00			
Sept. 30	E. G. Walker, rent .....	150 00			
Sept. 30	Parchen & Painter, stationery ..	8 00			
Sept. 30	Thos. A. Ray, water.....	6 00			
Sept. 30	S. H. Crounse, box rent.....	4 00			
Sept. 30	Benj. D. Stone.....	150 00			
Sept. 30	I. H. Ming & Co., stationery.....	59 85			
Nov. 10	Henry Hitchins, painting.....	10 00			
Nov. 22	Wilkinson, Ronan & Co., printing	5 00			
Dec. 31	E. G. Walker, rent .....	150 00			
Dec. 31	Benj. D. Stone, messenger .....	150 00			
Dec. 31	T. C. Bailey, incidentals .....	55 43			
Dec. 31	S. H. Crounse, box rent.....	4 00			
Dec. 31	Thos. A. Ray, water.....	6 00			
Dec. 31	I. H. Ming & Co., stationery.....	27 50			
1872.					
Feb. 7	T. C. Bailey, wood, &c. ....	132 20			
March 31	E. G. Walker, rent .....	150 00			
March 31	Benj. D. Stone, messenger .....	150 00			
March 31	T. C. Bailey, incidentals .....	17 50			
March 31	S. H. Crounse, box rent.....	4 00			
March 31	Thos. A. Ray, water .....	6 00			
March 31	I. H. Ming & Co., stationery.....	8 50			
May 11	I. H. Ming & Co., stationery.....	98 50			
June 30	E. G. Walker, rent .....	150 00			
June 30	Benj. D. Stone, messenger .....	150 00			
June 30	S. H. Crounse, box rent.....	4 00			
June 30	Thos. A. Ray, water.....	6 00			
June 30	T. C. Bailey, incidentals .....	38 50			
June 30	Sands Brothers .....	65 00			
June 30	J. R. Sanford.....	83 00			
June 30	T. C. Bailey, incidentals .....	8 30			
		2,000 00			2,000 00

JOHN E. BLAINE.  
Surveyor General for Montana.

## J.—Statement of special deposits made for the surveys of public lands in Montana Territory during the fiscal year ending June 30, 1872.

Name of deputy.	Date of deposit.	No. of C. D.	Name of depositor.	Amount of deposit for field work.	Amount of deposit for office work.	Location of work.	Remarks.
W. Y. Smith.	1871. July 14	453	A. Piessdorf.	\$20 00	\$25 00	T. 1 N., R. 6 E.	Surveyed and returned.
T. C. Bailey..	1872. April 23	649	V. Stanbach.	125 00	50 00	T. 8 N., R. 1 W.	Surveyed and returned.
Total .....				145 00	75 00		

JOHN E. BLAINE,  
Surveyor General for Montana Territory.



K.—Statement of plats made in the United States surveyor general's office for Montana Territory during the fiscal year ending June 30, 1872.

Description.	Original.	Department.	Local land-office.	Skeleton.	Total.
Plats of standard lines.....	6	6			12
Plats of township lines.....	18	18			36
Plats of subdivision lines.....	56	56	56		168
Plats of mining claims.....	18	18	18		54
Plats for deputy surveyors.....				20	20
Plats for townships in which sections were made fractional by mineral claims.	10	10	10		30
Plats of the Territory.....	1	1		2	4
Aggregate.....	109	109	84	22	324

JOHN E. BLAINE,  
Surveyor General for Montana.

L.—Statement showing the number of acres of land surveyed in Montana Territory since the inception of the surveys up to June 30, 1872.

	Acres.
Surveyed up to June 30, 1869.....	682, 226. 27
Surveyed during fiscal year ending June 30, 1870.....	596, 335. 47
Military reservations same year.....	3, 803. 67
Surveyed during fiscal year June 30, 1871.....	873, 716. 26
Surveyed during fiscal year June 30, 1872.....	1, 092, 974. 77
Military reservation same year.....	2, 400. 00
Mineral land surveyed on unsurveyed lands since the inception of the surveys up to June 30, 1872, for which application for patent has been made, and not otherwise reported.....	1, 236. 81
Total.....	3, 252, 693. 25

JOHN E. BLAINE,  
Surveyor General for Montana Territory.

M.—Statement showing the number of linear miles run, the rates per mile, and the total costs of surveys in Montana Territory, during the fiscal year ending June 30, 1872.

Description.	Distance.			Rate per mile.	Cost.
	Miles.	Chains.	Links.		
Standard lines.....	118	67	59	\$15 00	\$1, 782 67
Meridian lines.....	66	00	00	15 00	990 00
Township lines.....	681	47	27	12 00	8, 179 09
Section lines.....	2, 889	22	83	10 00	28, 892 86
Meander lines.....	103	56	18	10 00	1, 037 02
Total number miles run.....	3, 859	33	87		
Total cost of surveys.....					40, 881 64

JOHN E. BLAINE,  
Surveyor General for Montana.



N.—Statement giving names, nativity, &c., of surveyor general and clerks in surveyor general's office at Helena, Montana Territory, for the fiscal year ending June 30, 1872, and to date.

Names.	Occupation.	Nativity.	Whence appointed.	Salaries.
John E. Blaine.....	Surveyor general.....	Pennsylvania.....	Wyoming.....	\$3,000
T. C. Bailey.....	Chief clerk.....	Indiana.....	Indiana.....	1,800
George F. Marsh.....	Principal draughtsman..	Vermont.....	Montana.....	1,500
Henry A. Lambert.....	Assistant draughtsman..	Minnesota.....	Montana.....	1,200
John N. Heldt.....	Clerk.....	New York.....	Montana.....	1,500
Michael R. Hayes.....	Clerk.....	Ireland.....	Montana.....	1,200
Benjamin D. Stone.....	Messenger.....	New York.....	Montana.....	600

JOHN E. BLAINE,  
Surveyor General for Montana.

O.—Estimate for the surveying service in the district of Montana for the fiscal year ending June 30, 1874.

Office expenses:	
Compensation of surveyor general.....	\$3,000
Compensation of chief clerk.....	1,800
Compensation of chief draughtsman.....	1,500
Compensation of assistant draughtsman.....	1,500
Compensation of two clerks, at \$1,500.....	3,000
Incidental expenses, messenger, rent, &c.....	3,000
Total.....	13,800

Surveying service:	
200 miles meridian and standard lines, at \$15.....	\$3,000
1,500 miles exterior lines, at \$12.....	18,000
8,000 miles section lines.....	80,000
Total for surveys.....	101,000
Aggregate.....	114,800

JOHN E. BLAINE,  
Surveyor General for Montana Territory.

J.—Report of the surveyor general of Idaho Territory.

SURVEYOR GENERAL'S OFFICE,  
Boise City, Idaho Territory, August 31, 1872.

SIR: In compliance with your instructions I have the honor to submit my annual report, in duplicate, of the field and office work performed in this surveying district for the fiscal year ending June 30, 1872, together with the usual tabular statements relating thereto.

A. Estimate of expenses incidental to the survey of public lands in Idaho for the fiscal year ending June 30, 1874.

B. Statement of expenditure of appropriation for compensation of surveyor general and clerks in his office for the fiscal year ending June 30, 1872.

C. Statement of incidental and office expenses for the fiscal year ending June 30, 1872.

D. Statement of expenditure of the appropriation for surveys for the fiscal year ending June 30, 1872.

E. Statement of original maps and copies transmitted to the General Land Office, and to the district offices, since the date of my last report.

F. Statement showing the condition of contracts entered into since June 30, 1871.



G. Statement of descriptive notes sent to local land offices since the date of my last report.

H. Tabular list of townships surveyed since the date of my last report, showing the area of public lands, &c.

I. Names, nativity, &c., of surveyor general, clerks, &c., for the fiscal year ending June 30, 1872.

The surveys of the past year were the exterior and subdivision lines of the northern part of this Territory, to the Cœur d'Alene Lake. Several thousands of acres of the most fertile land in this neighborhood is claimed by the Cœur d'Alene and other Indians, as a reservation, subject to an anticipated treaty.

The grazing lands in the central part of the Territory were surveyed to the extent of the appropriation.

The surveys for the present fiscal year will be confined to the grazing and agricultural land, in the central and southern portion of the Territory, mostly in Oneida County, and to the country in the vicinity of the Pend d'Oreille and Cœur d'Alene Lakes.

The northern part of Idaho is rapidly filling up with settlers. Some hundred claims have been taken up the past year. The genial climate, (although in a high latitude,) and fertility of soil; the proximity of the Northern Pacific Railroad, and the navigation of the Columbia River, affording an egress for the transportation of produce, give this part of the Territory an advantage over the central and southwestern portions, and the land will be entirely settled within a short period.

The placer mines of Shoshone, Nez Percé, Idaho, and Lemhi Counties have yielded each within the past year about \$500,000 in gold. Lemhi County has some fertile valleys, where settlers have claims, cultivating vegetables, &c., to supply the mining camps. The difficulty of access to the mines of this county is its great drawback.

The mines of Boise County are making the most of an extensive flow of water, owing to the great quantity of snow that covered the mountains the last winter. It is estimated that over \$1,000,000 in gold dust will be taken from the placer mines this summer. Some mines of quartz gold have been opened and tunneled; the rock taken out in the excavation paying all expenses. These mines, when thoroughly opened, will be for sale.

The mines of Owyhee County have more than averaged their yearly supply of silver ore, in addition to new mines being discovered and opened. These mines have their agencies in San Francisco, and rise and fall in prices with the fluctuations, or bulling and bearing, of that market. Galena mines, rich with argentiferous ores, have been discovered in the southern part of this county. The ore is easily melted, and furnaces are being erected to run the metal into bars for transportation.

The valuable silver mines of Alturos County, at Atlanta and Rocky Bar, are almost in *statu quo*, owing to the want of capital to develop them. Exertions are being made to induce capitalists to come to the rescue; and could the mines be fairly opened, they would, without doubt, find ready sale. About one hundred thousand dollars in gold dust have been taken from the placer mines of this county the past year.

The farmers of Ada County have had a favorable year, their crops bringing remunerative prices, the demand equaling the supply.

The raising of cattle and sheep is entered into extensively, and all who have turned their attention to stock, in full or in part, are rapidly accumulating wealth. Some parties own thousands of head of cattle and sheep, the extensive grazing grounds and mild winters offering inducements which are not found elsewhere.

The boundary between Idaho and Utah was established last year. Several large settlements are found to be in this Territory, the people having heretofore paid taxes and tithes to Utah. The southern portion of this county is now the most populous in Idaho. The inhabitants have possessed claims here for years. Most of them are in good circumstances, and many are wealthy. Nine-tenths of the entire population are farmers and stock raisers. All the valleys are susceptible of cultivation, and in many instances are exceedingly rich and productive. The principal crop is small grain. Apple and peach trees have been planted with fair success. For the last three years the grasshoppers have destroyed a large percentage of the grain crops, but the present year, so far, seems to be a favorable one, and it is thought these pests have left for good.

The addition to the population to this county, and to the Territory, by defining the boundary, is at least twenty-five hundred. The settlements are Franklin, Weston, and Malade City, in the valley, and Fish Haven, Ovid, Bloomington, Paris, and Saint Charles, on Bear Lake. Bear Lake is about fifty miles long and ten wide, the largest portion of which is in this county. There are some fertile valleys still unsettled, and immigrants could find no better place to settle, it being in the vicinity of the Pacific Railroad and Salt Lake City, Corinne, and Ogden, and in a populous neighborhood. They would here have advantages which are not often offered to pioneers.

The Oneida Salt Works, at Soda Springs, manufacture yearly about fifteen thousand bushels of salt, nearly all of which is disposed of in this Territory and in Montana.



Silver ore has been discovered near the borders of Utah, and the mines are being prospected.

The boundary of the Shoshone and Bannock Indian reservation, in this county, which embraces one million eight hundred thousand acres, should be surveyed without delay, for reasons heretofore given.

Referring to a letter from the Department of March 18, 1868, on the subject of reclamation of "barrens" and "deserts," and to my annual report of that year on this subject, I would ask that the attention of Congress may be called to the importance of having some bill passed whereby these sage brush plains may be rendered of some use to the community. With but few exceptions, under a general system of irrigation the whole waste of millions of acres could be brought into extensive cultivation, producing from twenty to forty bushels of grain to an acre. The soil is mostly decomposed granite, and where irrigation has been resorted to, has in every instance proved a success in raising heavy crops. The system of ditching in Utah has redeemed the land under its influence, and has made what was apparently a "barren" to "blossom as the rose."

The settling of our sage plains would probably induce a company to build a railroad through this Territory from the Pacific Railroad to the Columbia River. As it is, Boise City, the most beautiful town in trees and shrubbery between Portland and Salt Lake, is as isolated as was Palmyra of old.

The expense of reclaiming these plains would be millions of dollars. I would recommend that every alternate section of land between the Snake and Boise Rivers be donated to a company who would build a canal or ditch at the most practicable point for the largest flow of water. The Snake River flows through a rocky cañon, the walls of which are perpendicular, and from one hundred to two hundred feet high. By drawing off the water from above Shoshone Falls it could be turned upon the sage plains. Many streams course through these plains, having cut deep channels, or running through rocky cañons; these will require flumes or aqueducts to convey the water on a level, frequently of half a mile long. If a company could be organized to accept this immense undertaking, the public interests would be benefited.

The operations of the United States assay office at this place have been of much advantage to the miners, saving them an average of twenty per cent. where they formerly sold their gold dust to brokers and bankers. Three thousand seven hundred ounces of gold dust have been assayed since the 1st of March, valued at sixty thousand dollars. The amount for the next two months will be greater. If a bullion fund could be established in connection with the assay office it would save the miners still more, as they are compelled to sell their bars to the bank at a heavy discount.

Application is expected soon to be made to this office to have the mineral lands of Boise County surveyed. The villages of Centreville, Placerville, Pioneer City, and Quartzburgh, situated in the "basin," are all mining towns, and numerous quartz and placer mines are in close connection for several miles. As the country is exceedingly rough and mountainous, the deputy surveyors cannot, without loss, extend the surveys to this part of the Territory at the prices now allowed. I have, in consequence, asked in my estimate that \$15 per mile be paid for exterior lines and \$12 for subdivisions, for the purpose of surveying the mineral lands of this county.

But one application has been made in this surveying district for the survey of quartz lodes, and the survey was made, and notes and maps transmitted to the proper office. No application has ever been made for any other surveys beyond the regular extension of the public surveys.

I wish particularly to call your attention to the estimates made for the fiscal year ending June 30, 1874. They are really less than the public service imperatively demands, owing to the large extent of country to be surveyed in order to reach many fertile valleys where the settlers are very anxious to have the surveys made, and they cannot understand why their particular section is the one not to be first surveyed. We have used great care to have the surveys extended as rapidly as our small appropriations would permit, and hope, after another season's work in the field, there will be little cause for complaint on the part of agricultural claimants.

It is a mistaken policy to forbid the commencement of work in the field until after the beginning of the fiscal year for which the appropriation is made. If an appropriation is made, for instance, in February, the surveys cannot be commenced until after the 1st day of July, thus losing to the surveying service three or four months of the best season of the year, and the time also that the deputy surveyors can do work most economically. It should be left with the Commissioner of the General Land Office to order the commencement of field work under the appropriations at such time as he in his judgment may think most advisable for the benefit of the public service. I would recommend a modification in the land laws applicable to this Territory, and have no doubt it would be found equally so in most of these mountain Territories.

The timber is mostly located in the rugged mountain sections, and situated some miles from the farming lands. These mountain lands are being stripped of their timber, and the time is not far distant when there will be great scarcity of timber not only for building purposes, but even for fire-wood, when the land will be rendered worthless



to the Government. If the land law could be so amended as to allow every freeholder to enter at the proper land office, say, eighty acres of wood land, by paying the prices fixed by law, the Government could dispose of all the timber lands, and it would then be for the interest of the parties to protect the young growth of timber for future use, as well as to endeavor to prevent fires in the timber regions.

I am, sir, respectfully, your obedient servant,

L. E. CARTEE,  
*Surveyor General of Idaho.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office.*

A.—*Estimate of expenses incidental to the surveys of the public lands in Idaho for the fiscal year ending June 30, 1874.*

Office expenses:

For salary of surveyor general .....	\$3, 000
For salary of clerks .....	4, 000
For rent of office, messenger, fuel, books, and other expenses .....	3, 000
	<u>10, 000</u>

Surveying service:

For surveying 300 miles standard lines, at \$15.....	\$4, 500
For surveying 150 miles guide meridian, at \$15.....	2, 250
For surveying 480 miles exterior boundaries, at \$12 .....	5, 760
For surveying 120 miles exterior boundaries, at \$15 .....	1, 800
For surveying 3,600 miles subdivisions, at \$10.....	36, 000
For surveying 600 miles subdivisions, at \$12 .....	7, 200
	<u>57, 510</u>
	<u>67, 510</u>

B.—*Statement of expenditure of appropriation for compensation of surveyor general and clerks in his office for the fiscal year ending June 30, 1872.*

1871.		1871.	
To amount paid surveyor general and clerks, third quarter, 1871.	\$1, 575 00	By appropriation approved March 3, 1871, as advised by letter from the Department of April 28, 1871.	\$7, 000 00
To amount paid surveyor general and clerks, fourth quarter, 1871.	1, 725 75		
1872.			
To amount paid surveyor general and clerks, first quarter, 1872.	1, 702 74		
To amount paid surveyor general and clerks, second quarter, 1872.	1, 575 00		
To balance.....	421 51		
Total.....	<u>7, 000 00</u>		<u>7, 000 00</u>

C.—*Statement of incidental and office expenses for the fiscal year ending June 30, 1872.*

1871.		1871.	
To amount expended third quarter, 1871.	\$405 19	By appropriation approved March 3, 1871, as advised by letter from the Department of April 28, 1871.	\$2, 500 00
To amount expended fourth quarter, 1871.	650 00		
1872.			
To amount expended first quarter, 1872.	551 46		
To amount expended fourth quarter, 1872.	490 29		
To balance.....	403 06		
Total.....	<u>2, 500 00</u>		<u>2, 500 00</u>



## D.—Statement of the expenditure of the appropriation for the fiscal year ending June 30, 1872.

1871	To amount reported for payment, on contract No. 25, to Allen M. Thompson .....	\$5, 165 86	1871	By appropriation approved March 3, 1871, as advised by letter from the Department of April 28, 1871.....	\$30, 000 00
	To amount reported for payment, on contract No. 28, to Samuel H. Thompson .....	5, 079 50		Balance .....	937 79
	To amount reported for payment, on contract No. 25, to Allen M. Thompson .....	10 50			
	To amount reported for payment, on contract No. 30, to Allen M. Thompson .....	580 14			
	To amount reported for payment, on contract No. 31, to Samuel H. Thompson .....	2, 702 33			
	To amount reported for payment, on contract No. 26, to Henry Meldrum .....	5, 037 54			
	To amount reported for payment, on contract No. 27, to Isaac N. Collard .....	5, 110 52			
	To amount reported for payment, on contract No. 30, to Allen M. Thompson .....	4, 935 47			
	To amount reported for payment, on contract No. 29, to John B. David .....	1, 302 85			
	To amount reported for payment, on contract No. 29, to John B. David .....	1, 013 08			
		<u>30, 937 79</u>			<u>30, 937 79</u>
	Balance .....	937 79			

## E.—Statement of original maps and copies transmitted to the General Land Office and to the district offices since the date of my last report.

Descriptive plats.	Original.	General Land Office.	District offices.	Total.	When transmitted to the General Land Office.	When transmitted to the district offices.
Exterior lines of townships 1, 2, 3, 4, 5, and 6 south, through ranges 9, 10, 11, 12, and 13 east.	1	1	.....	2	Sept. 16, 1871	
Township 4 south, range 8 east.....	1	1	1	3	Sept. 16, 1871	Sept. 16, 1871
Township 5 south, range 8 east.....	1	1	1	3	Sept. 16, 1871	Sept. 16, 1871
Township 1 south, range 9 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 4 south, range 9 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 5 south, range 9 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 1 south, range 10 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 2 south, range 10 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 4 south, range 10 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 5 south, range 10 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Township 1 south, range 11 east.....	1	1	1	3	Nov. 8, 1871	Nov. 8, 1871
Exterior lines of townships 1 and 2 south, through ranges 14 and 15 east.	1	1	.....	2	Dec. 14, 1871	
Exterior lines of townships 1 and 2 south, though range 16 east.	1	1	.....	2	Dec. 14, 1871	
Township 2 south, range 14 east.....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 2 south, range 15 east.....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 1 south, range 16 east.....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 2 south, range 16 east.....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Eighth standard parallel north through ranges 4 and 5 west.	1	1	.....	2	Dec. 14, 1871	
Exterior lines of townships 37 north, through ranges 2 and 3 west, townships 39 north, ranges 3, 4, and 5 west, townships 40 north, range 4 west, townships 41 north, ranges 3, 4, and 5 west, townships 24 north, ranges 4 and 5 west.	1	1	.....	2	Dec. 14, 1871	
Township 37 north, range 3 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 39 north, range 4 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 40 north, range 4 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 41 north, range 4 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 42 north, range 4 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871



## E.—Statement of maps and copies transmitted to the General Land Office, &amp;c.—Continued.

Descriptive plats.	Original.	General Land Office.	District offices.	Total.	When transmitted to the General Land Office.	When transmitted to the district offices.
Township 39 north, range 5 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 40 north, range 5 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 41 north, range 5 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Township 42 north, range 5 west .....	1	1	1	3	Dec. 14, 1871	Dec. 14, 1871
Ninth standard parallel north, through range 5 west.	1	1	.....	2	Dec. 26, 1871	
Exterior lines of township 38 north, through range 1 west, townships 37, 38, and 39 north, through range 2 west, townships 38, 39, and 44 north, range 3 west, townships 43, 44, and 45 north, range 4 west, townships 43 and 44 north, range 5 west.	1	1	.....	2	Dec. 26, 1871	
Township 37 north, range 2 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 38 north, range 2 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 38 north, range 3 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 44 north, range 4 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 43 north, range 5 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 44 north, range 5 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 45 north, range 5 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871
Township 2 south, range 11 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 1 south, range 12 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 2 south, range 12 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 4 south, range 12 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 5 south, range 12 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 1 south, range 13 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 2 south, range 13 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 4 south, range 13 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 1 south, range 14 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Township 1 south, range 15 east .....	1	1	1	3	Jan. 15, 1872	Jan. 15, 1872
Exterior lines of townships 31 north, through ranges 3 and 4 east, and 2 west; and townships 30 north, through ranges 4 east and 1 west .....	1	1	.....	2	Feb. 5, 1872	
Township 31 north, range 3 east .....	1	1	1	3	Feb. 5, 1872	Feb. 5, 1872
Township 31 north, range 4 east .....	1	1	1	3	Feb. 5, 1872	Feb. 5, 1872
Township 32 north, range 1 west .....	1	1	1	3	Feb. 5, 1872	Feb. 5, 1872
Township 30 north, range 4 east .....	1	1	1	3	May 16, 1872	May 16, 1872
Township 31 north, range 1 west .....	1	1	1	3	May 16, 1872	May 16, 1872
Township 32 north, range 1 east .....	1	1	1	3	May 16, 1872	May 16, 1872
Township 32 north, range 2 west .....	1	1	1	3	May 16, 1872	May 16, 1872
Township 39 north, range 3 west .....	1	1	1	3	Dec. 26, 1871	Dec. 26, 1871

## F.—Statement showing the condition of contracts entered into since June 30, 1871.

No. of contract.	Name of deputy.	Date of contract.	Character, amount, and locality of work.	Remarks.
25	Allen M. Thompson ..	1871. May 15	Exterior boundaries of townships 1, 2, 3, 4, 5, and 6 south, ranges 9, 10, 11, 12, and 13 east, and subdivisions of townships 4 and 5 south, range 8 east.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted.
26	Henry Meldrum .....	May 19	Eighth standard parallel north, through ranges 4 and 5 west, and exterior and subdivision lines of townships 39, 40, 41, and 42 north, ranges 4 and 5 west.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted.
27	Isaac N. Collard .....	May 19	Ninth standard parallel north, through ranges 4 and 5 west, and the exterior subdivision lines of townships 43, 44, 45, and 46 north, of ranges 4 and 5 west.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted. NOTE.—Townships 37, 38, and 39 north, ranges 2 and 3 west, substituted for township 44 north, ranges 4 and 5 west.
28	Samuel H. Thompson ..	May 26	Subdivisions of townships 1, 4, and 5 south, range 9 east, townships 1, 2, 4, and 5 south, range 10 east, township 1 south, range 11 east.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted.



## F.—Statement showing the condition of contracts entered into, &amp;c.—Continued.

No. of contract.	Name of deputy.	Date of contract.	Character, amount, and locality of work.	Remarks.
29	John B. David .....	1871 July 22	Subdivisions of township 30 north, range 4 east, townships 31 north, ranges 3 east and 1 west, townships 32 north, ranges 1 east and 1 and 2 west.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted.
30	Allen M. Thompson...	Sept. 15	Exterior lines of townships 1 and 2 south, ranges 14 and 15 east, and subdivisions of township 2 south, range 11 east, townships 1, 2, 4, and 5 south, range 12 east, townships 1, 2, and 4 south, range 13 east, and townships 1 south, ranges 14 and 15 east.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted.
31	Samuel H. Thompson.	Sept. 19	First standard parallel north, and east to the east boundary of range 12 east, and exterior and subdivisions of townships 1 south, ranges 16 and 17 east, and subdivisions of townships 2 south, ranges 14 and 15 east.	Surveys completed, and notes returned and approved, and plats and transcripts transmitted. NOTE.—First standard parallel not extended.

## G.—Statement of descriptive lists sent to local land offices since the date of my last report.

Township.	Range.	Date when transmitted.	Township.	Range.	Date when transmitted.
4 south .....	8 east .....	June 26, 1872	38 north .....	2 west .....	June 26, 1872
5 south .....	8 east .....	do .....	38 north .....	3 west .....	do .....
1 south .....	9 east .....	do .....	39 north .....	3 west .....	do .....
4 south .....	9 east .....	do .....	44 north .....	4 west .....	do .....
5 south .....	9 east .....	do .....	43 north .....	5 west .....	do .....
1 south .....	10 east .....	do .....	44 north .....	5 west .....	do .....
2 south .....	10 east .....	do .....	45 north .....	5 west .....	do .....
4 south .....	10 east .....	do .....	2 south .....	11 east .....	do .....
5 south .....	10 east .....	do .....	1 south .....	12 east .....	do .....
1 south .....	11 east .....	do .....	2 south .....	12 east .....	do .....
2 south .....	14 east .....	do .....	4 south .....	12 east .....	do .....
2 south .....	15 east .....	do .....	5 south .....	12 east .....	do .....
1 south .....	16 east .....	do .....	1 south .....	13 east .....	do .....
2 south .....	16 east .....	do .....	2 south .....	13 east .....	do .....
37 north .....	3 west .....	do .....	4 south .....	13 east .....	do .....
39 north .....	4 west .....	do .....	1 south .....	14 east .....	do .....
40 north .....	4 west .....	do .....	1 south .....	15 east .....	do .....
41 north .....	4 west .....	do .....	31 north .....	3 east .....	do .....
42 north .....	4 west .....	do .....	31 north .....	4 east .....	do .....
39 north .....	5 west .....	do .....	32 north .....	1 west .....	do .....
40 north .....	5 west .....	do .....	30 north .....	4 east .....	do .....
41 north .....	5 west .....	do .....	31 north .....	1 west .....	do .....
42 north .....	5 west .....	do .....	32 north .....	1 east .....	do .....
37 north .....	2 west .....	do .....	32 north .....	2 west .....	do .....



H.—*Tabular list of townships surveyed since the date of my last report, showing the areas of the public lands and Indian reservation.*

No. of townships surveyed.	Description of township.	Areas of public lands.	Areas of Indian reservation.
		<i>Acres.</i>	<i>Acres.</i>
1	Township 4 south, range 8 east.....	22,968.88	
2	Township 5 south, range 8 east.....	22,645.73	
3	Township 1 south, range 9 east.....	22,665.50	
4	Township 4 south, range 9 east.....	22,927.58	
5	Township 5 south, range 9 east.....	22,185.54	
6	Township 1 south, range 10 east.....	22,532.28	
7	Township 2 south, range 10 east.....	23,034.01	
8	Township 4 south, range 10 east.....	23,044.51	
9	Township 5 south, range 10 east.....	22,475.29	
10	Township 1 south, range 11 east.....	22,490.91	
11	Township 2 south, range 14 east.....	23,040.53	
12	Township 2 south, range 15 east.....	23,037.60	
13	Township 1 south, range 16 east.....	22,475.52	
14	Township 2 south, range 16 east.....	23,049.41	
15	Township 37 north, range 2 west.....	6,070.46	
16	Township 39 north, range 4 west.....	23,085.87	
17	Township 40 north, range 4 west.....	3,824.98	
18	Township 41 north, range 4 west.....	14,049.27	
19	Township 42 north, range 4 west.....	8,898.76	
20	Township 39 north, range 5 west.....	23,057.11	
21	Township 40 north, range 5 west.....	18,869.20	
22	Township 41 north, range 5 west.....	23,008.95	
23	Township 42 north, range 5 west.....	23,019.01	
24	Township 38 north, range 2 west.....	23,092.65	
25	Township 38 north, range 3 west.....	23,015.45	
26	Township 39 north, range 3 west.....	22,293.88	
27	Township 44 north, range 4 west.....	16,659.77	
28	Township 43 north, range 5 west.....	14,141.71	
29	Township 44 north, range 5 west.....	23,067.47	
30	Township 45 north, range 5 west.....	23,002.70	
31	Township 2 south, range 11 east.....	22,956.12	
32	Township 1 south, range 12 east.....	22,598.71	
33	Township 2 south, range 12 east.....	22,964.68	
34	Township 4 south, range 12 east.....	7,673.48	
35	Township 5 south, range 12 east.....	22,985.32	
36	Township 1 south, range 13 east.....	22,608.92	
37	Township 2 south, range 13 east.....	11,458.74	
38	Township 4 south, range 13 east.....	5,098.84	
39	Township 1 south, range 14 east.....	22,653.08	
40	Township 1 south, range 15 east.....	22,540.32	
41	Township 31 north, range 3 east.....	12,159.57	
42	Township 32 north, range 1 west.....	14,049.54	
43	Township 31 north, range 4 east.....	12,844.69	
44	Township 30 north, range 4 east.....	2,563.70	
45	Township 37 north, range 3 west.....	10,427.20	
46	Township 31 north, range 1 west.....	17,324.25	
47	Township 32 north, range 2 west.....	10,194.28	
48	Township 32 north, range 1 east.....	5,744.07	
Total area.....		866,576.04	
Ninety-one townships previously reported.....		1,403,765.06	
Ten townships previously reported of Indian reservation.....		130,088.97	130,088.97
Total acres surveyed.....		2,400,430.07	

I.—*Names, nativity, &c., of surveyor general, clerks, &c., for the fiscal year ending June 30, 1872.*

Names.	Occupation.	Nativity.	Whence appointed.	Time of service.	Amount.
La Fayette Cartee.....	Surveyor general	New York.....	Idaho Territory	Entire year ....	\$3,000 00
William P. Thompson.....	Chief clerk.....	do.....	do.....	do.....	1,800 00
Daniel Cram.....	Draughtsman.....	N. Hampshire.....	do.....	do.....	1,500 00
Theophilus W. Randall.....	Clerk.....	England.....	do.....	Sixty-eight days	278 49
Thomas Conroy.....	Messenger.....	Ireland.....	do.....	Entire year ....	600 00



*K.—Report of the surveyor general of Utah Territory.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Salt Lake City, Utah, July 20, 1872.

SIR: I have the honor to submit, in duplicate, the annual report of the operations of this office for the fiscal year ending June 30, 1872, together with a map showing the progress of the public surveys, and tabular statements from A to C, inclusive.

The appropriation for the past year was expended in a manner to meet the wants of the settler, with a due regard for the rights of the railroad corporations within the jurisdiction of the office.

The close of the year finds all contracts completed, and the work of the office in a satisfactory condition.

Since the date of my last report, the evidences of thrift and prosperity have multiplied on every hand. Our agricultural interests are keeping pace with the demand for the products of the farm.

Old settlements, depopulated years ago in consequence of Indian hostilities, are being re-occupied, while new settlements are being made. In the vicinity of Salt Lake City, across the river Jordan, a large canal is being constructed, which will reclaim one hundred thousand acres of excellent land, and bring it under a high state of cultivation. Beginning at the mouth of Weber Cañon, a canal has recently been completed, stimulating settlement along the line of the Utah Central Railroad, between the towns Kaysville and Ogden.

This has been a most propitious season for the farmer. More rain has fallen than usual, and many crops will mature with little or no irrigation. The Territory is entirely free from the ravages of the grasshopper, and the prospects of rich harvests are most encouraging.

Substantial improvements are being made in the various towns and settlements, and particularly is this the case in Salt Lake City. Many new and commodious business houses have been erected, and dwellings are numbered by the score.

Work was begun this spring on a horse railway, and the cars are now running from the depot through the principal streets.

Gas will be furnished by the 1st day of November next, through 32,000 feet of distributing pipes. The works are being erected on a scale capable of supplying 200,000 cubic feet per day.

A brass and iron foundry was established in December last, consisting of three buildings, containing respectively the foundry, machine shop, and blacksmith shop. It is designed to supply all kinds of castings for smelting works, and machinery of every description. I have examined numerous brass and iron castings recently made, and found them to be of excellent workmanship.

## MINES.

The mining law of May 10, 1872, meets with general favor, as it not only reduces the cost and simplifies the manner of obtaining titles, but affords ample security against the illegal and unjust claims so frequently interposed where patents are applied for.

The silver mines are developing and producing in a most satisfactory manner, and continue to attract the attention of capital seeking investment.

There are now forty organized mining districts, five mills, and twenty-one furnaces and smelting works. The value of the products of these districts for the past year is \$3,177,100.

Thousands of tons of ore are annually shipped beyond the Territory for reduction; but, as fuel, cheap labor, and the necessary material for reduction works are found at home, it is not probable that large shipments of ore will long continue.

In speaking of fuel in connection with the treatment of our ores, Prof. B. Silliman says: "The coals of Utah and Wyoming are all brown coals. The coke which they produce is strong, and hardly more in bulk than the coal from which they are derived.

"About 70 miles below the Little Cottonwood Cañon, at a point known as San Pete, there are beds of these coals, one of which is said to be 14 feet in thickness, the coke of which amounts to 67 per cent. of the coal, with about 7 per cent. of light ash. I have not seen the coal in place, but have examined samples of it and the coke it produces. This locality is on the path of the Utah Southern Railway, which is already constructed half the distance to the coal. With the completion of this railway, it is believed that the coke of this locality can be laid down at Sandy Station at about \$8 per ton."

He proceeds to state his views of the advantages to be derived from smelting the ores of the Emma mine here, as follows:

"Accepting the high cost paid in Bingham Cañon for fuel, flux, and transportation, as the basis of calculation, there will be an important saving of costs in smelting the first class ores of the Emma mine at or near Sandy Station, as compared with shipping them to Swansea via Liverpool. The data for this opinion are as follows, viz:



"1st. The average total cost and losses per ton of 2,000 pounds on 2,450,777 pounds of Emma ores shipped to Liverpool in August and October, 1871, and assaying  $41\frac{1}{2}$  per cent. in lead and 11.220 ounces in silver, was, by the items furnished by the company's secretary in Salt Lake City, (Mr. Smith,) as follows:

"Gross value per ton of the above ores at the Sandy Station, \$206.18; net value at Sandy Station, after deducting all costs, charges, losses, &c., \$109.55; costs and losses by shipment and smelting, \$97.13.

"2d. Mr. Ellsworth Daggett, of Bingham Cañon, Utah, who is in charge of the furnaces of the Winamuck mine, where the success is satisfactory to the owners, states to us that the total cost, including the losses of handling such ores, and the bullion from the same, by smelting at or near Sandy Station, based on results obtained in handling his Winamuck ores, would be per ton of 2,000 pounds, \$75.85. The difference in these two estimates is, in favor of smelting the Emma ores near Sandy Station, \$18.28; to this should be added saving in sacking, \$4.

"You will find on inquiry that Mr. Daggett's estimate of the costs and losses of smelting are much in advance of estimates made by other parties in Utah, and it is highly probable it may be safe to estimate the saving at \$30 per ton."

And so it conclusively appears that furnaces and smelters, properly managed, will save hundreds of thousands of dollars annually to the Territory.

#### RAILROADS.

The pecuniary success attending the construction of the Utah Central Railroad has caused capital to seek investment in connecting lines.

The Utah Southern Railroad will, in all probability, reach the town of Payson, 65 miles distant, the present year. Twenty miles are now finished, and the cars running. The destination of the road is a connection with the 35th parallel road at the most feasible point in Arizona, and the route through Utah, as nearly as can be determined, will be through the series of valleys to the west of the Wabsatch range of mountains, and in as close proximity to the cordon of settlements as the nature of the country will admit.

I have endeavored to obtain some information relative to the business transacted by this line, so far as completed. Failing in this, I submit a statement of the earnings of the Utah Central Railroad, of which it is but a continuation, thus conveying some idea of the business of the southern line and its probable increase, as follows:

For the year 1870, \$136,005.51; for the year 1871, \$338,792.38. Increase, \$202,786.87.

Amount of freight for the year 1871, 68,900 tons.

The Utah Northern Railroad (narrow gauge) has twenty-five miles completed. With its southern terminus at a point on the Central Pacific Railroad, near Brigham City, the line follows up the east bank of Bear River, and by a circuitous route enters Cache Valley, and will ultimately be extended to Soda Springs, in Idaho.

A right of way for the Utah, Idaho and Montana Railway was granted by Congress in May, and on the 17th of June ground was broken and grading begun at Corinne. This road is designed to be the connecting chain between the Northern and Central Pacific Railroads, and will soon be instrumental in opening up a vast and most important mineral and agricultural section.

A company composed of individuals commanding all the capital necessary for the construction of the line was organized and incorporated on the 2d day of May, 1872, as the Salt Lake, Sevier Valley and Pioche Railroad Company, under an act of the governor and legislative assembly for the building of a narrow-gauge road from Salt Lake City to Pioche, Nevada, a distance of three hundred miles or more. The course of the road from this city is westerly twenty-two miles to Lake Point, on the southern shore of Great Salt Lake; thence southerly ninety miles; thence southwesterly some two hundred miles to its southern terminus. It is estimated that the cost will not exceed \$12,000 per mile, and arrangements are now being perfected for the prosecution of the work. Although the country is comparatively undeveloped, twelve mining districts lie in the course of the road, which are already producing large quantities of argentiferous galena and milling ores. The iron mines of Pinto, containing millions of tons of specular and magnetic ore, carrying 60 per cent. of iron, must prove of incalculable benefit and value when this road reaches its destination.

Narrow-gauge roads leading from the main lines into the mining districts will not be as difficult of construction as some may suppose. A road from the Utah Southern Railroad to the Miller mine, in American Fork Cañon, is progressing rapidly, and will be completed by September 1. Its length will be twenty-two miles, and its cost about \$250,000.

There are but few districts more difficult access by rail than that of American Fork.

In comparing the condition of affairs to-day with that of four years ago, we note a change as wonderful as it was unexpected. At that time there was not a mile of railroad in operation within our borders; to-day 270 miles are completed.



Then telegraphic communication was confined to the most populous agricultural districts; now lines traverse the deep cañons, and afford our thrifty camps speedy intercourse with the outside world.

Then not a productive mine was being worked; now developments prove the existence of the most valuable and extensive deposits of argentiferous ores yet discovered on the continent. Then the laborer sought remunerative employment in vain, and the Territory was on the verge of bankruptcy; now labor is in demand, and our depots are filled with money.

Then the lives and property of the people were at the mercy of a dangerous priesthood, which knew no law but that of its own creation; to-day thousands of freemen, acknowledging no allegiance save to their country, find pleasant homes in Utah, and the strong arm of the General Government renders life and property secure.

All of which is respectfully submitted.

C. C. CLEMENTS,  
*United States Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner of the General Land Office.*



A.—Statement of surveys of public land completed during the fiscal year ending June 30, 1872.

Deputy.	Contract.		Surveys.	Extent.	Cost.
	No.	Date.			
Julien Bausman ...	12	Dec. 9, 1870	Fourth standard parallel south..... Exterior boundaries of township 17 south, ranges 6 and 7 west; township 18 south, ranges 6 and 7 west; township 19 south, ranges 7 and 8 west; township 20 south, ranges 7 and 8 west. Subdivision of township 17 south, ranges 6 and 7 west; township 18 south, 6 and 7 west; township 19 south, ranges 7 and 8 west; township 20 south, ranges 7 and 8 west.	Mls. chs. lks. 6 0 00 104 8 10	\$72 00 1,249 23
Joseph Gorlinski...	17	June 5, 1871	Meanders of township 19 south, range 7 west; township 20 south, range 8 west..... Guide meridian from townships 5 and 6 south, ranges 9 and 10 west, to sections 7 and 12; township 2 north, ranges 8 and 9 west. Principal base line from quarter section corner between sections 5 and 32, townships 1 north and 1 south, range 7 west, to sections 3 and 4, townships 1 north and 1 south, range 9 west. Exterior boundaries of township 5 south, ranges 7, 8, and 9 west; township 4 south, ranges 8 and 9 west; township 3 south, ranges 8 and 9 west; township 2 south, ranges 7, 8, and 9 west; township 1 south, ranges 8 and 9 west; township 1 north, range 8 west.	11 74 55 36 40 00 10 40 00 106 77 48	119 31 547 50 157 50 1,283 62
Augustus D. Ferron	18	June 5, 1871	Subdivision of township 5 south, ranges 7, 8, and 9 west; township 4 south, ranges 8 and 9 west; township 3 south, ranges 7, 8, and 9 west; township 1 north, range 8 west; township 2 north, ranges 8 and 9 west. Guide meridian from townships 6 and 7 south, ranges 5 and 6 west, to townships 5 and 6 south, ranges 5 and 6 west. First standard parallel south.....	402 12 14 6 0 00 24 0 00	4,021 76 90 00 360 00
J. Fewson Smith...	19	June 6, 1871	Exterior boundaries of townships 7 and 8 south, range 6 west; townships 7, 8, and 9 south, range 5 west; townships 7, 8, and 9 south, range 4 west; townships 7 and 8 south, range 3 west. Subdivision of townships 7, 8, and 9 south, range 6 west; townships 7, 8, 9, and 10 south, range 5 west; townships 7, 8, 9, and 10 south, range 4 west; townships 7 and 8 south, range 3 west. Guide meridian from townships 10 and 11 north, ranges 1 east and 1 west, to the corner to sections 7, 12, 13, and 18, township 7 north, ranges 1 east and 1 west.	86 16 62 470 21 90 20 0 00	1,034 49 4,702 68 300 00
Ferdinand Dickert	20	July 10, 1871	Exterior boundaries of townships 6 and 7 north, range 1 east; township 6 north, range 2 east; townships 7 and 10 north, range 1 west. Subdivision of townships 6 and 7 north, range 1 east; townships 6 and 7 north, range 2 east; township 7 north, range 1 west.	26 0 00 133 13 66	312 00 1,331 70
Do .....	21	Aug. 7, 1871	Exterior boundary of township 3 south, range 3 east..... Subdivision of township 3 south, range 3 east..... Meanders of township 3 south, ranges 1, 2, and 3 east.....	40 00 1 0 00 10 15 83	6 00 10 00 101 98
James E. Freeman.	23	Sept. 3, 1871	Exterior boundaries of townships 14, 15, and 16 south, range 2 west; township 16 south, range 3 west; township 17 south, ranges 2 and 3 west; township 18 south, ranges 2 and 3 west; township 19 south, ranges 2 and 4 west; township 20 south, range 2 west. Subdivision of townships 14, 15, and 16 south, range 2 west; township 16 south, range 3 west; township 17 south, ranges 2 and 3 west; township 18 south, ranges 2, 3, and 4 west; townships 19 and 20 south, range 2 west. Meanders of townships 19 and 20 south, range 2 west..... Exterior boundary of township 2 south, range 3 east..... Subdivision of township 2 south, range 3 east.....	76 66 27 296 46 57 3 63 28 1 0 00 16 0 25	921 94 2,965 80 37 90 12 00 160 00



## A.—Statement of surveys of public land, &amp;c.—Continued.

Deputy.	Contract.		Surveys.	Extent.	Cost.
	No.	Date.			
Augustus D. Ferron	24	Sept. 28, 1871	Exterior boundary of township 13 south, range 5 east; township 14 south, range 4 east; township 15 south, ranges 2, 3, and 4 east.	Mls. chs. lks. 47 23 94	\$567 59
George V. M. Bouteille and Joseph Gorlinski.	26	Nov. 20, 1871	Subdivision of township 13 south, range 5 east; townships 15 and 16 south, range 2 east.....	27 9 75	271 22
			Third standard parallel north .....	24 0 00	360 00
			Exterior boundaries of township 11 north, ranges 7, 8, and 9 west; township 12 north, ranges 7, 8, 9, 10, 11, and 12 west; township 13 north, range 11 west.	78 14 19	938 13
			Subdivision of township 11 north, ranges 8 and 9 west; township 12 north, ranges 8, 9, 10, 11, and 12 west; township 13 north, range 11 west.	347 51 36	3,476 42
Augustus D. Ferron	29	Feb. 5, 1872	Subdivision of township 4 south, range 2 east.....	40 00	5 00
George V. M. Bouteille.	30	Apr. 29, 1872	Exterior boundaries of townships 4 and 5 south, range 4 west.....	7 0 00	84 00
Joseph Gorlinski...	31	June 26, 1872	Subdivision of townships 4 and 5 south, range 4 west .....	3 40 00	35 00
			Exterior boundaries of township 1 north, range 1 east.....	3 40 00	42 00
			Subdivision of township 1 north, range 1 west .....	7 40 39	75 05
Total .....				2,845 61 38	30,180 23



B.—Statement of deposits made by individuals for the survey of mines and agricultural lands during the fiscal year ending June 30, 1872.

Name of depositor.	Surveys.	Field work.	Office work.	Total.
Jeter Clinton	Township 1 south, range 4 west.	\$30 00	\$20 00	\$50 00
Edward P. Vollum	Townships 14, 15, 16, and 17 south, ranges 2 and 5 west.	825 00	50 00	875 00
S. G. Sewell and William Howard	Township 2 south, range 2 east.	220 00	30 00	250 00
George Hacket	Township 4 south, range 2 east.	100 00	20 00	120 00
J. B. Arnold	Township 4 south, range 4 west.	200 00	25 00	225 00
Moses Hirschman	Township 1 north, range 1 east.	120 00	20 00	140 00
John H. Ely	Township 14 south, range 5 east; townships 16, 17, and 18 south, range 2 east	475 00	50 00	525 00
R. N. Baskin and Loyd Aspinwall	Miller mine, American Fork district		22 00	22 00
James P. Page	Highland Chief mine, Big Cottonwood district		25 00	25 00
A. K. Smith	Sailor Jack mine, Big Cottonwood district		22 00	22 00
E. H. Shaw	Sparrow Hawk mine, Camp Floyd district	60 00	25 00	85 00
E. H. Shaw	Last Chance mine, Camp Floyd district	40 00	25 00	65 00
E. H. Shaw	Marion mine, Camp Floyd district	40 00	25 00	65 00
Pike & Co.	Silver Circle Consolidated mine, Camp Floyd district	30 00	22 00	52 00
Pike & Co.	Wandering Boy mine, Camp Floyd district	30 00	22 00	52 00
Noah Armstrong	Mammoth mine, East Tintic district	40 00	25 00	65 00
Thomas Jenkins and George Crismon	First Northern Extension Mammoth mine, East Tintic district		22 00	22 00
Charles Smith, secretary	Emma mine, Little Cottonwood district	175 00	25 00	200 00
John A. Groesbeck	Flagstaff mine, Little Cottonwood district	100 00	50 00	150 00
H. W. Lawrence	Monarch mine, Ophir district	30 00	22 00	52 00
U. S. Godbe	Shamrock mine, Ophir district	30 00	22 00	52 00
H. W. Lawrence	San Joaquin mine, Ophir district	30 00	22 00	52 00
Samuel Ten Eyck	Mars mine, Star district		25 00	25 00
Samuel Ten Eyck	Taylor mine, Star district		25 00	25 00
T. F. Fuller	Harrington mine, Star district	120 00	22 00	142 00
Isador Morris	Galena mine, West Mountain district	40 00	25 00	65 00
Eli B. Kelsey	Eli mine, West Mountain district	30 00	20 00	50 00
Eli B. Kelsey	Fliess mine, West Mountain district	30 00	20 00	50 00
Eli B. Kelsey	Vespasian mine, West Mountain district	30 00	20 00	50 00
Eli B. Kelsey	George mine, West Mountain district	30 00	20 00	50 00
Eli B. Kelsey	Merrimac mine, West Mountain district	30 00	20 00	50 00
William M. Johns	Yosemite mine, West Mountain district	60 00	22 00	82 00
J. R. Murphy	Portland mine, West Mountain district	50 00	22 00	72 00
J. R. Murphy	Dartmouth mine, West Mountain district	50 00	22 00	72 00
C. K. Gilchrist	Last Chance mine, West Mountain district	18 00	22 00	40 00
E. H. Shaw	Silver Star mine, Camp Floyd district		22 00	22 00
B. A. M. Froiseth	Consolidated Camp Douglas mine, Camp Floyd district		22 00	22 00
R. C. Chambers	Daniel Webster mine, Ohio district	100 00	22 00	122 00
R. C. Chambers	Homestead mine and mill site, Ohio district	100 00	22 00	122 00
Total		3,263 00	964 00	4,227 00



C.—Statement of amount of salaries paid surveyor general and clerks for the fiscal year ending June 30, 1871, also incidental expenses for the same period.

Name.	Occupation.	Time of service.		Rate of salary.	Amount.
		From—	To—		
Courtland C. Clements .....	Surveyor general .....	June 30	June 30	\$3, 000	\$3, 000 00
Milton F. Clements.....	Chief clerk .....	June 30	June 30	1, 800	1, 800 00
Bernard A. M. Froiseth.....	Draughtsman .....	June 30	June 30	1, 500	1, 500 00
John A. R. Hanson .....	Clerk .....	June 30	Dec. 31	1, 400	502 00
James E. Weigle .....	Clerk .....	Oct. 2	Nov. 21	1, 400	193 80
Total.....					6, 995 80

INCIDENTAL EXPENSES.

Expended during the first fiscal quarter .....	\$213 75
Expended during the second fiscal quarter.....	281 90
Expended during the third fiscal quarter .....	244 50
Expended during the fourth fiscal quarter .....	495 95
Total .....	1, 236 10

D.—Estimate of appropriations required for the surveying service in the Territory of Utah for the fiscal year ending June 30, 1874.

For salary of surveyor general.....	\$3, 000
For salary of chief clerk .....	1, 800
For salary of draughtsman .....	1, 500
For salary of clerk .....	1, 400
For office rent, fuel, stationery, incidentals, and messenger .....	2, 000
For continuing the survey of the base, meridian, township, and subdivision lines.....	25, 000
Total .....	34, 700

L.—Report of the surveyor general of Nevada.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Virginia City, Nevada, October 8, 1872.

SIR: In compliance with your instructions I have the honor to submit the following report, in duplicate, of the operations of this office during the fiscal year ending June 30, 1872, with accompanying statements relative to the surveying department:

A. Statement of account of appropriation for compensation of the United States surveyor general of Nevada, and the employés in his office, during the fiscal year 1871-'72.

B. Statement of account of appropriation for survey of public lands in Nevada during the fiscal year 1871-'72.

C. Statement of account of appropriation for rent of office, fuel, books, stationery, and other incidental expenses, including pay of messenger in the office of the United States surveyor general of Nevada during the fiscal year 1871-'72.

D. Statement of contracts entered into by the United States surveyor general for Nevada, with the number of miles surveyed during the fiscal year 1871-'72.

E. List of lands surveyed in the State of Nevada during the fiscal year 1871-'72.

F. Statement of special deposits with the sub-treasury of the United States for survey of mineral claims in Nevada during the fiscal year 1871-'72.

G. List of mineral claims surveyed in the State of Nevada during the fiscal year 1871-'72.



H. Statement of plats made in the office of the United States surveyor general of Nevada during the fiscal year 1871-'72.

I. Statement for the surveying service in the State of Nevada for the fiscal year ending June 30, 1874.

## REPORT.

During the last fiscal year our surveys have been continued over the different valleys where parties have located with droves of cattle or horses or flocks of sheep. These valleys vary in extent from 10 to 100 miles in length and from 1 to 10 miles in width. They are generally well supplied with springs of excellent water and abound in the native grasses, such as bunch, blue-joint and rye. Many of the valleys and flanking foot-hills contain enough of the white sage for winter feed for all the stock that subsists on the abundant grasses during the summer months. These lands are eagerly sought by drovers from California and elsewhere, and the demand for them is steadily increasing, as the following statement by the State register will show:

"STATE OF NEVADA,  
"OFFICE SURVEYOR GENERAL AND LAND REGISTER,  
"Carson, August 14, 1872.

"SIR: Please find State selections of land from the opening of this office to 30th June:

	Acres.		Acres.
1867.....	5,560	1870.....	32,500
1868.....	18,200	1871.....	86,160
1869.....	37,120	1872, (to June 30).....	85,435

"The selections for the current year will be in the vicinity of 200,000 acres.

"Respectfully,

"JOHN DAY,  
"State Register.

"E. S. DAVIS, Esq.,

"United States Surveyor General of Nevada."

## STATE SCHOOL FUND.

The school fund of the State, growing out of the beneficent policy of the Government in donating generous tracts of the public land for the founding of schools, is a source of joy to every good citizen who believes that education is the surest bulwark of society. In proportion to its population, Nevada is not surpassed by any State of the Union in the means for promoting and fostering the education of its children. The following statement by the controller of the State shows the condition of the school fund:

"OFFICE STATE CONTROLLER,  
"Carson, September 17, 1872.

"SIR: In answer to your inquiry as to the *status* of our State school fund, (said fund being formed from the proceeds of the sale of lands donated for that purpose by the General Government,) I have the honor to submit the following statement:

State bonds, payable in gold and bearing 9½ per cent. interest per annum..	\$72,000 00
Gold coin.....	5,702 99
Currency .....	6,719 92
Total.....	<u>84,422 91</u>

"We have also a fund known as the 'special deposit fund,' in which all moneys are placed which are deposited for the purchase of lands not yet listed by the United States authorities to the States. When these lands are listed to the State this money is transferred to the State school fund. The amount now in this special deposit fund is \$117,269, currency. The greater part of this sum we hope to transfer to the State school fund by the 1st of January next.

"Yours, respectfully,

"W. W. HOBART,  
"State Controller.

"E. S. DAVIS, Esq.,

"United States Surveyor General for Nevada."



Since the date of my last annual report the mining industry of the State has prospered to an extent unequaled in any former year. The product of established mines in various parts of the State has been largely increased. This result has stimulated prospecting and added several new and promising mining districts to the existing list. The most important of these districts is at Schell Creek, in White Pine County, near the eastern boundary of the State, where there is a town containing 1,000 inhabitants, a quartz mill, hotels and boarding houses, express and stage offices and a newspaper—all the growth of a few months. The population of the State is increasing steadily, for employment is certain and wages high, and the opportunity for the workingman to become suddenly independent by a “rich strike” is not unfrequent. Not only do the miners prosper, but every branch of industry which is needed in the mining regions—saw-mills, gardens, farms and stock raising—flourishes in an unexampled degree. Industry finds certain reward; and it may be said safely that in no other part of the Union is there so large a sum of money per head in circulation as in the State of Nevada. Out of its apparently sterile mountains flows the silver stream which, like a generous river, quickens the industry and commerce of the Union and the world.

As good as the prospects of the Comstock mines were a year ago, they are much better now. Prices have never been so reasonable; the economy in the management is generally better; and there is notably greater skill both in mining and milling. The developments made in the Crown Point and Belcher mines during the past two years have removed every vestige of doubt respecting the existence of valuable ore in the depths of the lode. The barren zone has been cut through and the mines are *en bonanza*.

The following official *data*, showing the product for the past year and the present condition of the two mines named, possess interest, inasmuch as they foreshadow the future prospects of the great silver vein. Crown Point, ore body on the 900-foot level, 90 feet long, and greatest width 14 feet; on the 1,000-foot level, 200 feet long, and greatest width 60 feet; on the 1,100-foot level, 285 feet long, and greatest width 84 feet; on the 1,200-foot level, 350 feet long, and greatest width 124 feet. The 1,300-foot level has not been sufficiently explored to determine the length and width of the ore body at that point. Amount of ore extracted from July 1, 1871, to June 30, 1872, 69,371 tons, which produced bullion of the value of \$3,916,083.14. Average yield of ore per ton, \$56.45. Amount of dividends paid during the year, \$2,100,000. Belcher: ore body on 1,100-foot level, 300 feet long, and greatest width 90 feet; the 1,000 and 1,200 foot levels are not yet fully explored. Amount of ore extracted from August 1, 1871, to August 31, 1872, 71,985 tons, of the value of \$4,045,486.56. Amount paid in dividends during the period, \$2,184,000.

According to *data* furnished by the superintendent of Wells, Fargo & Co., the aggregate yield of the Comstock mines for the last fiscal year was \$11,053,328. The returns for the first half of the current year indicate that the yield of these mines will be largely increased.

The Sutro tunnel, which was projected to drain and ventilate and facilitate the working of the mines of the Comstock, after great depth has been attained, has been highly stimulated by the discoveries of large bodies of rich ore below the barren zone. On the 1st of July last the length of the tunnel was 3,282 feet; and the four shafts which, when finished, will ventilate the tunnel and materially hasten its completion, are sinking steadily.

The product of the silver mines of Eastern Nevada has increased largely since my last annual report, and it has been estimated that their yield during the present fiscal year will greatly exceed that of the Comstock. The argentiferous lead ore deposits of Eureka district, Lander County, produced nearly \$3,000,000 in 1871; and the silver mines in the counties of White Pine, Nye, Humboldt, Lincoln, Esmeralda, and Elko increased their product in the same period. The 20-stamp mill of the Manhattan Company, at Austin, Lander County, produced in ten months of 1871—two months having been devoted to additions and repairs—bullion of the value of \$979,065.73. But the most remarkable product of silver in Eastern Nevada occurred at the works of the Raymond and Ely Company, in Pioche district, Lincoln County. I am indebted to Mr. C. W. Lightner, superintendent of the company, for the following *data*: the company is working four mines, which produced from July 1, 1871, to August 31, 1872, 37,839 tons of ore, which yielded bullion of the value of \$4,000,000. The cost of extracting and reducing the ore was \$39.51 per ton. From March, 1871, to September, 10, 1872, the company has paid in dividends the sum of \$2,115,000. The aggregate sums transported from Pioche district for the twelve months ending July 1, 1872, was \$5,278,407.

Mining has revived in several districts. In Philadelphia district, Nye County, three companies of San Francisco capitalists recently purchased a number of well developed mines, and are now building mills for reducing the ore. These mills will be in operation before the close of the year, and will swell the bullion product of the State.



There are many copper mines in the State, but the high rates of labor and transportation render their working unprofitable at present. Only some of the mines situated on the line of the Central Pacific Railroad produce ores for transportation to San Francisco, where they are bought and shipped to the reduction works at Swansea.

## PRODUCT OF SILVER.

The total value of the silver bullion produced in Nevada during 1871 is as follows:

Comstock mines .....	\$11,053,328
Other parts of the State .....	11,123,728
Total .....	<u>22,177,056</u>

The product of the current year is estimated at from \$26,000,000 to \$30,000,000.

## MINERAL RESOURCES.

As the silver mines of the State are developed and their productive capacity largely increased, the supply of salt for beneficiating the ores becomes a question of interest. Happily saline tracts, several of them of great magnitude, exist throughout the State. A few of the most important tracts, both as respects product and quality, are situated advantageously for cheap transportation. A practical idea of the value of these saline deposits to the silver-mining industry of the State may be given by a brief statement of the present consumption of salt by the various reduction works. The report of the State comptroller for 1871 shows that 515,629 tons of silver-bearing ore were extracted and reduced, and that 221,238 tons of tailings were reclaimed and worked. Nearly the whole of this enormous product was reduced by chlorination and amalgamation, raw amalgamation requiring from 1 to 3 per cent. of salt per ton, and ore subjected to a chloridizing roasting (about one-fortieth of the whole product) requiring from 5 to 10 per cent. It is estimated that fully 10,000 tons of salt were consumed at the different mills in 1871. The great proportion of this salt was obtained from the salines of the State. Putting the price of milling salt at \$35 per ton, which is a low average, gives the sum of \$350,000 realized from this industry. Besides the salt used in the reduction of ores, a considerable part of that required for domestic, dairy, and packing purposes comes from the local salt works.

The great salt bed at Sand Springs, Churchill County, in the basin of the sink of the Humboldt and Carson Rivers, is the most notable deposit in the State. Near the surface the salt is loose and of inferior quality, but beneath this saline *débris* for the depth of 14 feet beautifully crystallized rock salt, resembling blocks of ice, is found. This article is absolutely pure. One of the most extensive salines in the State is known as the Eagle Salt Works, and is situated in what was formerly known as the Truckee desert, in a basin about twenty miles, respectively, from the water of the Carson, Humboldt, and Truckee Rivers. The Central Pacific Railroad runs within a mile of the salt vats of the company. Mr. B. F. Leete, who selected and located this tract, (which is now held by a company of twenty-two citizens under a statute of the State,) and who furnished these statistics, says that in his prospecting tour for salt he traveled over two thousand miles, in the course of which he observed a vast area of saline land the supply from which is apparently inexhaustible. The works of the company produced and sent to market from July 1, 1871, to June 30, 1872, 25,832 bushels of milling salt, and 2,202 bushels of table and dairy salt. An analysis of a sample of this refined salt gave 99 per cent. chloride of sodium. The productive capacity of this basin is increased annually by cultivation.

In many of the saline tracts, or connected with them, are extensive deposits of the borates of lime and soda. Two basins in Emerald County, about one hundred and forty miles from Wadsworth, on the Central Pacific Railroad, are rich in this crude borax. These basins are known respectively as Columbus and Fish Lake Valleys. In the former basin it has been estimated that 5,000 acres contain borates of lime and soda; the borate of soda efflorescing on the surface to the depth of an inch, and the borate of lime occurring in crystallized nodules, varying in size from a pea to a walnut. In the latter basin both of these borates occur in nearly equal abundance. Analyses of the borate of lime gave from 21 to 55 per cent. boracic acid. The crude borax produced in these basins can be easily concentrated by simple mechanical treatment with cold water, and an association under the title of the Nevada Consolidated Borax Company is now engaged in utilizing this valuable mineral and preparing it for market. These borates occur in nearly all the counties of the State. Borax is a valuable auxiliary in smelting ores. Carbonate of soda and common salt are also plentiful in these basins.

An extensive deposit of pure carbonate of soda was discovered near the Truckee desert, in Churchill County, and is worked profitably. This bed has been excavated to the depth of 40 feet without determining its thickness. The soda is literally quarried in huge blocks and transported to San Francisco. It is used in the reduction of



ores, and has a general commercial value. The cultivation of the lands containing salt, borax, and soda, hitherto characterized as "deserts" and "wastes," is fast growing into a substantial industry of the State.

The mining laws of Congress, approved July 26, 1866, July 9, 1870, and May 10, 1872, and the regulations thereunder, would appear to contain no provision for locating, surveying, and patenting lands bearing salt and kindred mineral deposits. This want is felt to be a hardship by the many citizens who have located and cultivated saline tracts. Having discovered the lands and subjected them to considerable improvements, they believe that the Government, in the spirit of its beneficent policy respecting the public domain, ought to enable them to obtain its patent. Without this absolute title they are liable to annoyance and litigation, and incur the risk of losing the benefits of their discovery and improvements. The locators of saline lands say that there appears to be no valid reason why they should not be surveyed and patented as placers are, subject, of course, to proper limits and price. As these salt lands are of great and growing importance to the State, I respectfully suggest the consideration of the subject to the honorable Commissioner.

#### GRAZING AND AGRICULTURE.

In my former reports I laid stress upon the fact that, notwithstanding the generally arid appearance of the State, it yet possesses considerable advantages for grazing and stock raising. There are few streams in the State, yet the heavy snows which fall upon the mountain ranges and lie upon the higher peaks all summer furnish abundant springs, which nourish the various grasses abounding in the foot hills. The grasses are principally of the bunch variety, and their quality of imparting extraordinary nutriment and corresponding vigor has been thoroughly tested for years.

A small shrub, known as the white sage, forms an important item in the grazing facilities of Nevada. This sage is found in nearly all parts of the State, but principally in the central and northern parts. It usually occupies the undulating slopes between the base of the mountains and the bottom lands of the valleys. It has neither the taste nor smell of the common sage; it has an acrid quality until it has been touched by the frost, after which it is as succulent and sweet as young clover. The average height of the bush is about one foot; the leaf is similar to that of the *artemisia*, of a delicate green color, and covered with a white down. It blossoms in August, and bears a small, globular white flower. Sometimes the sage grows in isolated patches of a few acres, and again it covers tracts containing thousands of acres. After the occurrence of frosts, horses, cattle, and sheep feed upon it with greedy avidity. It possesses great value for winter feeding. An old resident of the State, who has been engaged for years in raising stock, says, "The fattening quality of the white sage is remarkable. A poor animal feeding upon it will become fat in three weeks. And it produces rich milk, and tender, juicy beef." The area of white sage land in the State is estimated at 1,000,000 acres.

In the older settled parts of the State farmers have introduced various grasses with success where they had the means for irrigating. None has thrived so well as the alfalfa grass. In Washoe County upward of 2,000 acres of this grass are under cultivation, and it is predicted that this quantity will be doubled next year. The extraordinary yield per acre of alfalfa, and its excellence for hay, give it unusual value. Its cultivation during the first several years requires care; irrigation is necessary to sprout the seed and to keep the soil moist until the young blades are thick enough to shelter the soil from the summer sun and the dry winds. In favorable situations it is said to require only slight irrigation after the third year. On good land, properly cared for, two and even three crops have been produced in one season. The ordinary yield at each cutting is from two to three tons to the acre. Alfalfa pasturage is of great value to the dairy, as it inclines to plentiful and superior milk; it also affords cheap food for fattening hogs.

There is a sufficiently large area of land in the State, which might be subjected to irrigation, to produce all the grains and roots for the sustenance of a greatly increased population. The bulk of the flour and the barley and oats consumed in the State is brought from California. Mining and kindred pursuits constitute the general industry and make the rates of labor high, and domestic grains cannot compete successfully with the vast fields and cheaper labor of that State. But in the vicinity of every mining settlement farms and gardens for the cultivation of various roots and salad herbs are numerous. Good land in the mining region, which extends from the Sierras on the west to the eastern boundary, is sought and located constantly; and little farm gardens—cheerful oases in the desert—are rapidly studding the surface and contributing greatly to the health and comfort of the inhabitants.

#### TIMBER AND WOOD INDUSTRY.

The demand for enormous supplies of timber and wood for the mines and mills of the Comstock has called into existence enterprises as novel as they are stupendous. This



timber and wood is brought from different points in the Sierra Nevada Mountains to the railroad at Carson in vast flumes. One of these flumes, belonging to the Summit Flume Company, is, including its branches, 24 miles long—the main flume being 19 miles long. It is supplied with water from tributaries of Lake Tahoe. The flume is constructed in the form of V, the sides being 34 inches wide. It carries mining timbers of the largest dimensions, and is capable of running 450,000 feet of dry lumber, or 350,000 feet of green lumber, in a day, and has run 500 cords of wood in half a day. Five or six flumes are employed in the business. This mode of bringing timber and wood from the mountains to Carson, whence it is carried by rail to Virginia City, not only meets the enormous demand, which hauling in wagons could not do, but keeps prices reasonable.

## LOCAL RAILROADS.

Increased activity in all branches of industry was the immediate result of the completion of the Virginia and Truckee Railroad, connecting the Comstock mining region, by the way of Carson, with the Central Pacific Railroad at Reno. A large number of mills for the reduction of ores of the Comstock are situated at Carson, and the cheaper freight of the railroad has given value to innumerable tons of hitherto worthless ore. The length of this local road is 50 miles, and its cost \$3,000,000. During the last fiscal year there were carried over the road—

Wood from Carson to Virginia City, cords .....	84,000
Timber and lumber, feet .....	30,000,000
Ore from Virginia City to Carson, tons .....	180,000
Miscellaneous traffic, tons .....	25,000
Passengers, number of .....	12,000

The business of the road is increasing steadily, and it is estimated that the earnings of the current year will largely exceed those of last year.

It is confidently hoped that the narrow-gauge railroad projected to connect the Central Pacific Railroad with the mining town of Hamilton, White Pine County, will be pushed vigorously next year. Estimates of the business of the region to be traversed by the road show that it would be profitable. The road would supply the wants of several productive mining districts, and would greatly facilitate the business of the rich district of Pioche, which lies 180 miles southeast from Hamilton, and which this year bids fair to rival the product of the Comstock.

I am, very respectfully, your obedient servant,

E. S. DAVIS,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



*A.—Statement of account of appropriation for compensation of the United States surveyor general and the employes in his office during the fiscal year 1871-'72.*

Dr.			Cr.	
	Amount paid quarter ending September 30, 1871.	\$1,725 81	Appropriation, March 3, 1871.	\$7,000 00
	Amount paid quarter ending December 31, 1871.	1,725 81		
	Amount paid quarter ending March 31, 1872.	1,727 47		
	Amount paid quarter ending June 30, 1872.	1,818 13		
		6,997 22		
July 1, 1872	Balance .....	2 78		
		7,000 00		7,000 00

*B.—Statement of account of appropriation for surveys of public lands in Nevada during the fiscal year 1871-'72.*

Dr.			Cr.	
	Amount paid quarter ending September 30, 1871.	\$2,660 77	Appropriation of March 3, 1871.	\$45,000 00
	Amount paid quarter ending December 31, 1871.	14,552 54		
	Amount paid quarter ending March 31, 1872.	15,409 57		
	Amount paid quarter ending June 30, 1872.	12,285 06		
		44,907 94		
July 1, 1872	Balance .....	92 06		
		45,000 00		45,000 00

*C.—Statement of account of appropriation for rent of office, fuel, books, stationery, and other incidental expenses, including pay of messenger, during the fiscal year 1871-'72.*

Dr.			Cr.	
	Amount paid quarter ending September 30, 1871.	\$485 00	Appropriation, March 3, 1871.	\$3,700 00
	Amount paid quarter ending December 31, 1871.	594 58		
	Amount paid quarter ending March 31, 1872.	655 85		
	Amount paid quarter ending June 30, 1872.	891 85		
		2,627 28		
July 1, 1872	Balance .....	1,072 72		
		3,700 00		3,700 00



D.—Statement of contracts entered into by the United States surveyor general for Nevada, with the number of miles surveyed during the fiscal year 1871-'72.

Contract.		Name of deputy.	Work embraced in contract and returned to this office.	Contract amount.	Miles surveyed.			Returned amount.	Date of transmittal.	Remarks.
No.	Date.				Standard.	Township.	Section.			
44	1871. June 15	E. B. Monroe and A. G. Bateman.	First standard parallel north from the corner of ranges 61 and 62 east to the corner of ranges 62 and 63 east. Third standard parallel north from the corner of ranges 60 and 61 east to the corner of ranges 67 and 68 east, and the exterior boundaries and subdivision lines of townships 4, 5, 6, and 7 north, range 60 east; townships 4 and 5 north, range 61 east; townships 4, 5, 6, 7, 8, 9, and 10 north, range 62 east; Mount Diablo meridian.	\$8,000 00	M. C. L. 42 0 00	M. C. L. 131 70 98 *61 80	M. C. L. 530 43 81 *2 41 14	\$7,552 54	1871. Oct. 11	Closed.
45	June 14	A. J. Hatch and J. H. Eaton	Subdivision lines of township 44 north, range 50 east; township 45 north, range 51 east; exterior and subdivision lines of township 30 north, range 34 east; township 32 north, ranges 48 & 49 east; township 31 north, ranges 49, 50, and 51 east; Mount Diablo meridian.	2,700 00	6 0 00	39 77 28	208 22 38 *67 05	2,660 77	Sept. 9	Closed.
46	Aug. 23	E. B. Monroe and A. G. Bateman.	Second standard north from townships 10 and 11 north, ranges 62 and 63 east, to townships 10 and 11 north, ranges 67 and 68 east; also the exterior and subdivision lines of townships 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 north, ranges 66 and 67 east; Mount Diablo meridian.	10 000 00	30 0 00	192 12 42 *1 42 81	726 43 68 *6 11 87	10,000 00	1872. Feb. 2	Closed.
47	Sept. 11	A. J. Hatch and J. C. Smyles.	Exterior and subdivision lines of townships 15 and 16 north, ranges 53 and 54 east; townships 17 and 18 north, ranges 53, 54, and 55 east; townships 19, 20, 21, 22, 23, and 24 north, range 55 east; exterior boundaries of township 23 north, range 56 east; also sub-	7,000 00	18 0 00	117 28 86 *13 95	538 59 40 *37 30	1,680 41 5,319 59	Nov. 17 Dec. 30	Closed. Closed.

\* Convergency.



## D.—Statement of contracts entered into by the United States surveyor general for Nevada, &amp;c.—Continued.

Contract.		Name of deputy.	Work embraced in contract and returned to this office.	Contract amount.	Miles surveyed.			Returned amount.	Date of transmittal.	Remarks
No.	Date.				Standard.	Township.	Section.			
	1871.				M. C. L.	M. C. L.	M. C. L.		1872.	
48	Nov. 1	E. B. Monroe and A. G. Bateman.	division lines of township 33 north, range 46 east; Mount Diablo meridian. Exterior and subdivision lines of townships 19 and 20 north, ranges 66 and 67 east; townships 14, 15, 16, 17, 18, 19, and 20 north, range 63 east; townships 13, 14, 15, 16, 17, 18, 19, and 20 north, range 64 east; townships 17, 18, and 19 north, range 65 east; Mount Diablo meridian.	\$11,500 00	.....	67 68 25 *1 34 65 126 46 28 *79 74	211 30 92 *5 60 81 713 55 79 *3 25 70	\$3,002 90 8,497 10	Mar. 13 Jan. 15	Closed. Closed.
49	Dec. 15	A. J. Hatch and J. C. Smyles.	Exterior and subdivision lines of townships 22, 23, 24, 26, and 28 north, range 56 east; township 38 north, ranges 44 and 45 east; townships 42 and 43 north, range 50 east; townships 26 and 27 north, range 55 east; exterior of township 27 north, range 56 east; township 28 north, range 55 east, and the subdivision lines of township 25 north, ranges 55 and 56 east; Mount Diablo meridian.	5,400 00	.....	75 26 36	150 21 72 285 24 52 *5 08	2,406 67 2,853 69	Mar. 15 May 19	Closed. Closed.
50	1872. June 8	A. J. Hatch and J. C. Smyles.	Subdivision lines of townships 20, 21, and 22 north, range 20 east; township 23 north, range 18 east; Mount Diablo meridian.	1,000 00	.....	.....	93 28 81 *5 39	934 27	June 30	Closed.
Total .....				45,600 00	96 0 00	756 3 38	3,477 25 37	44,907 94		

\* Convergency.



## E.—List of lands surveyed in the State of Nevada during the year 1871-'72.

Location.	Township north.	Range east.	Public	Mineral.	Unsurveyed.		Total.
					Barren.	Swamp.	
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Buena Vista Creek .....	30	34	960.00	2,880.00	19,200.00	.....	23,040.00
Humboldt Valley .....	31	49	23,018.91	.....	.....	.....	23,018.91
	31	50	5,428.46	.....	17,595.44	.....	23,023.90
	32	48	5,761.78	.....	17,228.48	.....	22,990.26
	32	49	7,636.77	.....	15,371.20	.....	23,007.97
Bull Run Creek .....	44	50	8,604.45	.....	14,339.60	.....	22,944.05
Deep Creek .....	45	51	22,927.28	.....	.....	.....	22,927.28
White River Valley .....	4	60	22,967.11	.....	.....	.....	22,967.11
	4	61	22,941.44	.....	.....	.....	22,941.44
	5	60	22,960.03	.....	.....	.....	22,960.03
	5	61	22,937.21	.....	.....	.....	22,937.21
	6	60	23,033.88	.....	.....	.....	23,033.88
	7	61	23,000.94	.....	.....	.....	23,000.94
	7	62	16,612.23	2,560.66	3,840.00	.....	23,012.89
	8	62	17,251.75	5,757.86	.....	.....	23,009.61
	9	62	7,654.99	1,921.90	13,445.44	.....	23,022.33
	10	62	883.16	1,280.00	12,821.36	.....	22,984.52
Humboldt Valley .....	33	46	2,240.00	.....	20,751.84	.....	22,991.84
	15	53	22,927.68	.....	.....	.....	22,927.68
Newark Valley .....	15	54	8,068.20	.....	14,851.80	.....	22,920.00
	16	53	23,033.11	.....	.....	.....	23,033.11
	16	54	17,922.39	.....	5,122.48	.....	23,044.87
	17	53	8,000.00	.....	15,004.80	.....	23,004.80
	17	54	19,028.35	.....	4,000.00	.....	23,028.35
	17	55	13,571.44	.....	9,439.36	.....	23,010.80
	18	54	3,998.62	800.00	18,176.00	.....	22,974.62
	18	55	19,616.00	1,412.84	1,920.00	.....	22,948.84
	19	55	15,511.80	.....	7,431.20	.....	22,943.00
Huntingdon Valley .....	20	55	7,845.36	.....	11,882.60	3,201.68	22,929.64
	21	55	8,155.84	.....	8,155.20	6,718.08	23,029.12
	22	55	6,165.76	.....	13,238.72	3,600.00	23,004.48
	23	55	5,763.58	.....	17,204.56	.....	22,968.14
	24	55	12,167.56	.....	10,771.20	.....	22,938.76
Spring Valley .....	11	66	19,839.88	3,183.98	.....	.....	23,023.86
	11	67	23,043.21	.....	.....	.....	23,043.21
	12	66	19,201.34	3,802.58	.....	.....	23,003.92
	12	67	23,017.30	.....	.....	.....	23,017.30
	13	66	19,203.84	3,781.67	.....	.....	22,985.51
	13	67	22,990.08	.....	.....	.....	22,990.08
	13	68	634.72	.....	22,343.60	.....	22,978.32
	14	66	11,521.44	.....	11,447.84	.....	22,969.28
	14	67	22,942.56	.....	.....	.....	22,942.56
	15	66	11,320.02	.....	11,304.80	.....	22,624.82
	15	67	22,577.60	.....	.....	.....	22,577.60
	16	66	7,360.00	.....	15,684.80	.....	23,044.80
	16	67	21,771.06	1,280.00	.....	.....	23,051.06
	17	66	5,443.90	.....	17,575.64	.....	23,019.54
	17	67	23,027.35	.....	.....	.....	23,027.35
Steptoe Valley .....	18	66	8,321.56	.....	14,661.36	.....	22,982.92
	13	64	22,964.95	.....	.....	.....	22,964.95
	14	63	3,841.06	.....	19,189.92	.....	23,030.98
	14	64	22,931.02	.....	.....	.....	22,931.02
	15	63	6,946.00	.....	15,798.32	.....	22,744.32
	15	64	20,901.99	1,856.73	.....	.....	22,758.72
Huntingdon Valley .....	22	56	5,442.73	.....	11,520.00	6,026.13	22,988.86
	23	56	22,986.14	.....	.....	.....	22,986.14
Humboldt Valley .....	38	44	8,720.11	.....	14,252.96	.....	22,973.07
Owyhee Creek .....	42	50	6,061.97	.....	16,947.12	.....	23,009.09
	43	50	12,735.68	.....	10,241.92	.....	22,977.60
Steptoe Valley .....	16	63	13,760.60	.....	9,269.40	.....	23,030.00
	16	64	9,594.51	.....	13,441.64	.....	23,036.15
	17	63	15,678.08	.....	7,318.48	.....	22,996.56
	17	64	11,648.83	.....	11,361.20	.....	23,010.03
	17	65	3,808.97	.....	19,200.40	.....	23,009.37
	18	63	4,962.53	.....	18,017.12	.....	22,979.65
	18	64	16,578.88	6,402.33	.....	.....	22,981.21
	18	65	8,887.24	.....	14,081.92	.....	22,969.16
	18	67	22,983.43	.....	.....	.....	22,983.43
	19	63	19,204.79	.....	3,758.44	.....	22,963.23
	19	64	22,965.03	.....	.....	.....	22,965.03
	19	65	3,965.00	.....	18,987.76	.....	22,952.76
	19	66	10,239.98	.....	12,754.08	.....	22,994.06
	19	67	22,968.03	.....	.....	.....	22,968.03
	20	63	11,501.82	.....	11,540.16	.....	23,041.98
	20	64	22,851.75	.....	.....	.....	22,851.75
	20	66	12,711.58	.....	12,590.53	.....	25,302.11
	20	67	25,327.81	.....	.....	.....	25,327.81



E.—List of lands surveyed in the State of Nevada, &c.—Continued.

Location.	Township north.	Range east.	Publie.	Mineral.	Unsurveyed.		Total.
					Barren.	Swamp.	
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Huntingdon Valley.....	24	55	12, 167. 56	.....	10, 771. 20	.....	22, 938. 76
	25	55	12, 819. 92	.....	10, 240. 00	.....	23, 059. 92
	25	56	15, 612. 61	.....	7, 360. 00	.....	22, 972. 61
	26	55	11, 529. 12	.....	11, 520. 00	.....	23, 049. 12
	26	56	9, 580. 44	.....	13, 440. 00	.....	23, 020. 44
	27	55	12, 332. 96	.....	10, 720. 00	.....	23, 052. 96
	28	56	20, 703. 86	.....	2, 240. 00	.....	22, 943. 86
Peavine district .....	20	20	17, 465. 37	.....	5, 440. 00	.....	22, 905. 37
	21	20	8, 486. 92	.....	14, 560. 00	.....	23, 046. 92
	22	20	4, 647. 96	.....	18, 600. 00	.....	23, 247. 96
	23	18	12, 949. 00	.....	10, 080. 00	.....	23, 029. 00
Total.....			1,250,278.19	36, 920. 55	720, 051. 89	19, 545. 89	2, 026, 796. 52

F.—List of special deposits with the sub-treasury of the United States for mineral claims in Nevada during 1871-'72.

Survey number.	Name.	District.	Deputy.	Amount.	Remarks.
45	Sigmund Steinhart .....	4	T. J. Read..	\$70	Closed.
46	do .....	4	do .....	70	Do.
47	California .....	4	do .....	70	Do.
47	Eureka Consolidated .....	4	do .....	80	Do.
42	do .....	4	do .....	80	Do.
48	Ascendant .....	4	do .....	80	Do.
37	Mint .....	7	R. A. Chase	70	Do.
90	John A. Paxton .....	4	T. J. Read..	70	Do.
43	Eureka Consolidated .....	4	do .....	80	Do.
49	William A. Roberts .....	4	do .....	80	Do.
44	John A. Paxton and others .....	4	do .....	80	Do.
51	J. B. Osborne's .....	4	do .....	80	Do.
52	Ignatz Steinhart .....	4	do .....	70	Do.
50	H. G. Blasdel .....	4	do .....	80	Do.
41	E. B. Vollmer and R. B. Canfield .....	3	do .....	70	Do.
38	Bradshaw .....	3	do .....	50	Do.
39	do .....	3	do .....	50	Do.
71	Central No. 2 .....	7	R. A. Chase	75	Do.
39	Nelson Consolidated .....	7	do .....	75	Do.
40	Globe .....	7	do .....	75	Do.
52	Frankel .....	7	do .....	75	Do.
72	Gold Hill Tunnel .....	7	do .....	75	Do.
40	J. Moffat and others .....	4	T. J. Read..	80	Do.
57	James E. Perkins .....	4	do .....	70	Do.
37	Joseph R. Partridge .....	4	do .....	80	Do.



G.—List of mineral claims surveyed in the State of Nevada during the fiscal year 1871-'72.

Survey number.	Name of company.	Number of mineral district.	Location of claims.			Area in acres.	Date of approval.	Date of transmittal.	Character of lode.
			Mining district.	County.	Township.				
45	Sigmund Stienhart .....	4	White Pine .....	White Pine.	Unsurveyed .....	2.80	July 12, 1871	July 14, 1871	Silver.
46	do .....	4	do .....	do .....	do .....	4.00	July 13, 1871	July 14, 1871	Do.
47	California .....	4	do .....	do .....	do .....	4.60	July 14, 1871	July 14, 1871	Do.
41	Eureka Consolidated .....	4	Eureka .....	Lander .....	do .....	1.60	Aug. 1, 1871	Aug. 1, 1871	Do.
42	do .....	4	do .....	do .....	do .....	1.40	Aug. 7, 1871	Aug. 8, 1871	Do.
48	Ascendant .....	4	White Pine .....	White Pine.	do .....	5.50	Aug. 7, 1871	Aug. 8, 1871	Do.
37	Mint .....	7	Washoe & Eagle Valley.	Ormsby .....	Township 15 north, range 19 east..	14.92	Mar. 6, 1872	Aug. 15, 1872	Gold and silver.
90	John A. Paxton .....	4	Reese River .....	Lander .....	Unsurveyed .....	0.37	Aug. 29, 1871	Aug. 29, 1871	Silver.
43	Eureka Consolidated .....	4	Eureka .....	do .....	do .....	1.75	Sept. 8, 1871	Sept. 9, 1871	Do.
49	William A. Roberts .....	4	White Pine .....	White Pine.	do .....	2.10	Sept. 11, 1871	Sept. 11, 1871	Do.
44	J. A. Paxton and others .....	4	Secret Cañon .....	Lander .....	do .....	8.26	Mar. 8, 1872	Mar. 9, 1872	Do.
51	J. B. Osborne's .....	4	White Pine .....	White Pine.	do .....	3.60	Mar. 1, 1872	Mar. 6, 1872	Do.
52	Ignatz Steinhart .....	4	do .....	do .....	do .....	5.17	Mar. 2, 1872	Mar. 6, 1872	Do.
50	H. G. Blasdel .....	4	do .....	do .....	do .....	2.10	Oct. 20, 1871	Oct. 25, 1871	Do.
41	E. Vollmer and R. B. Canfield.	3	Philadelphia .....	Nye .....	do .....	2.80	Oct. 25, 1871	Oct. 26, 1871	Do.
38	Bradshaw .....	3	Silver Park .....	do .....	do .....	5.50	Nov. 21, 1871	Nov. 22, 1871	Do.
39	do .....	3	do .....	do .....	do .....	5.50	Nov. 21, 1871	Nov. 22, 1871	Do.
71	Central No. 2 .....	7	Virginia .....	Storey .....	Township 17 north, range 21 east..	5.00	Jan. 15, 1872	Feb. 17, 1872	Gold and silver.
39	Nelson Consolidated .....	7	Gold Hill .....	do .....	Township 16 north, range 20 east..	8.26	Feb. 20, 1872	Feb. 21, 1872	Do.
40	Globe .....	7	do .....	do .....	do .....	7.34	Feb. 29, 1872	Mar. 6, 1872	Do.
52	Frankel .....	7	American Flat .....	do .....	Township 16 north, range 21 east..	5.50	Jan. 29, 1872	Feb. 17, 1872	Do.
72	Gold Hill tunnel .....	7	Gold Hill .....	do .....	Township 17 north, range 21 east..	9.00	Feb. 11, 1872	Feb. 17, 1872	Do.
40	J. Moffat and others .....	4	White Pine .....	White Pine.	Unsurveyed .....	9.76	Mar. 19, 1872	Mar. 19, 1872	Silver.
37	James E. Perkins .....	4	Piermont .....	do .....	do .....	5.51	Mar. 25, 1872	April 1, 1872	Do.
37	Joseph R. Partridge .....	4	Pinto .....	do .....	do .....	4.60	April 1, 1872	April 1, 1872	Do.
Total .....						126.94			



H.—Statement of plats made in the office of the United States surveyor general during the fiscal year 1871-'72.

Description.	Original.	Department.	Register.	Sketches for deputies.	Total.
Plats of standard lines.....	1				1
Plats of township lines.....	13	11			24
Plats of townships subdivided.....	88	91	91		270
Plats of mineral claims.....	25	25	25		75
Sketches for deputies.....				3	3
Total.....					373

JAMES BUTLER,  
Chief Draughtsman.

I.—Statement for the surveying service in the district of Nevada for the fiscal year ending June 30, 1874.

For surveying four thousand miles of subdivision lines, one thousand miles of township lines, and five hundred miles of standard lines in the southern and southwestern portions of the State.....	\$59,500
For compensation of the surveyor general.....	3,000
For compensation of two clerks and two draughtsmen.....	6,300
Rent of office, fuel, stationery, and incidental expenses, including pay of messenger.....	4,200

M.—Report of the surveyor general of Arizona Territory.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Tucson, Arizona Territory, September 9, 1872.

SIR: In accordance with your instructions of the 5th of April last, I have the honor to herewith transmit, in duplicate, a report of the surveying operations within this district for the fiscal year ending June 30, 1872.

Statistical tables and documents accompany this report, to wit:

- A. Statement of contracts entered into payable out of the congressional appropriation.
- B. Account of the appropriation for public surveys.
- C. Account of the appropriations for the salary of the surveyor general, for the clerks in his office, and for incidental expenses.
- D. Number and character of plats made.
- E. Statement of the number of miles surveyed during the fiscal year ending June 30, 1872.
- F. Showing surveys of mines for patent.
- G. Showing the lands surveyed during the last fiscal year.
- H. Estimate for the surveying service in this district for the fiscal year ending June 30, 1874.
- K. Copy of letter regarding resurvey of the Pima and Maricopa Indian reservation.

Map showing the progress of survey within this district, and such other information as could be obtained by due diligence. With reference to the map it is proper to explain why the boundary of Maricopa County is imperfectly shown thereon. The statute creating that county says it shall be "bounded as follows, to wit: Commencing at the point where the San Carlos River crosses the parallel of thirty-four degrees of north latitude," &c. From what is deemed perfectly reliable information now in this office, the source of the San Carlos does not reach said parallel by about thirty miles, and the Salinas or Salt River passes westward south of said parallel and north of the San Carlos River's source, as shown upon the map.



## SURVEY OF INDIAN RESERVATIONS.

An accurate survey of the Indian reservations within Arizona is of the utmost importance. So far as I can learn none but the Pima and Maricopa has ever been surveyed, and the necessity for its resurvey I set forth to you in a letter of date last July 24, a copy of which is sent herewith and made part of this report. The reasons for such resurvey are quite as applicable to the survey of all others. Some of the reservations are very large, and the boundaries for many miles at places entirely unknown, and must ever be until properly surveyed and marked, and complete records made, which records are indispensable to an execution of the legal duties of the surveyor general, as well as of all officers connected with the management of the Indians. The control of the Arizona Indians, the restriction upon trade and intercourse with them and the many matters of detail relating thereto, are difficult and vexatious under the best circumstances, and as each year will inevitably add settlers upon the public lands near as well as remote from these reserves, it seems a plain duty of Government to promptly take such and all such action as will obviate conflicts. The lives and property of citizens and Indians may at any time be jeopardized for want of definite knowledge of the legal limits of each, hence the stress I put upon the subject under consideration.

## LAND CLAIMS UNDER THE LAWS OF SPAIN AND MEXICO.

Clearly defined boundaries to this class of lands form a necessity yearly increasing in importance.

It cannot be better stated than in this extract from your last annual report: "It is most important to the growth and prosperity of these Territories, to which settlement is being rapidly attracted by the extension of railroads, that a separation be made at the earliest possible period between the public lands and those claimed under foreign title."

Judging from much apparent evidence, there must be large tracts of lands in Arizona with valid titles under Spanish or Mexican laws. For reasons stated in my report for 1871, I have taken no action regarding them, as contemplated by the act of Congress of July 15, 1870; and after giving the subject fair consideration, I indorse your suggestion, (in your report for 1871,) "that the creation by Congress of a commission similar to that instituted by the act of March 3, 1851, for California, would best conduce to a speedy and just settlement of claims of this kind, and promote the rapid growth of those young and enterprising Territories."

## RAILROAD GRANTS.

The lands embraced within the grants are very extensive, and are in as much need of definitive designation by survey as any other. Until they are so defined, settlement, and especially valuable improvement, must be retarded within the belt of eighty miles, the odd sections of which are withdrawn from settlement on account of the Texas and Pacific Railroad Company, and to the same extent along the line of the Atlantic and Pacific Railroad route, if the grant to the latter be still valid.

Thus it will be seen that there are large undefined Indian reserves and Spanish and Mexican grants of indefinite extent and locality, and one hundred and sixty miles in breadth through the whole length of the Territory upon which the settler cannot go with safety. Other than this statement, no argument seems necessary to convince the legislative and executive departments of the Government of the necessity of distinguishing these several kinds of lands from that which the actual settler may yet obtain title to at the minimum price.

## IMPROVEMENTS, GENERAL AND SPECIFIC.

Two parties of the Texas and Pacific Railway engineers are now at work within Arizona, and we have the highest assurance that the whole line of this continental highway will be completed within five years. With this vast improvement will come population and peace, and it is greatly to be desired that Congress will recognize the wisdom of making the moderate appropriation asked for public surveys for the fiscal year ending June 30, 1874.

Letters of inquiry were early in the summer addressed to the several county assessors, seeking correct reports of the year's progress. Only two of these officers replied. The assessor of Mohave County, L. C. Melbourne, made a report, which I summarize as follows:

The population one year ago was only about one hundred, exclusive of military and Indians; in June of this year it was seven hundred and seventy-six, (776,) and is rapidly increasing. Present year's assessment of real estate, \$92,890.; personal, \$77,934. In Cerbat district there is one smelting furnace; in Cloride district, one smelting furnace; in Mineral Park, one five-stamp mill; at Hardyville, one ten-stamp mill. The mines are situated in the second range of mountains from the Colorado River, at an elevation of 3,000 feet, about thirty-five miles from the navigable water of the Colo-



rado. The degree of heat in summer ranges about  $90^{\circ}$  at noon, and  $50^{\circ}$  at night. In winter snow falls to the depth of eight inches, with some rain, but the rainy season is in July and August. But little land is yet cultivated in the county. When the Colorado overflows its banks, the Mohave Valley, bordering on the river, yields abundant grasses, which make the best of hay, as is the case this year.

Placer gold has been found on the bars of the Colorado in paying quantities, above the mouth of the Virgin River, but can only be worked when the water is low. In what is known as the Wallapai mining section, there are three villages, Cerbat, Mineral Park, and Cloride; and within it are one hundred and sixty (160) mines, upon all of which there are shafts, varying in depth from twenty (20) to one hundred and twenty (120) feet. The whole number of locations is about fifteen hundred, (1,500,) with some work done upon all. The ores generally show silver in all its forms, and in some cases in its native state. The mill at Mineral Park has worked ore from different mines; some from the Donahue yielded \$2,000 per ton; from the Keystone \$100; from the Reilley \$180; and from others about the same. The process is that of wet crushing. One year ago there were only about eighty prospectors in the district and no systematic mining in operation.

Maricopa County, so far as settled, is mostly agricultural. Pinal mining district, which is very rich in silver ores, as has been proven by the shipment of lots of several tons to San Francisco for reduction, was discovered about one year ago; but owing to the activity of the thieving and murdering savages, it had to be wholly abandoned. It contains immense veins of ore worth from \$40 to \$200 per ton, and is within twenty miles of the projected line of the Texas and Pacific Railroad. The larger share of the county is occupied by hostile Indians. The assessor informs me that eight thousand one hundred and forty (8,140) acres are this year under cultivation, mostly in barley and wheat, but partly in alfalfa, beans, Irish and sweet potatoes, onions, peppers, sorghum, and various kinds of vines. Three thousand and fifty (3,050) fruit trees are planted, and seven thousand four hundred and sixty-four (7,464) grape cuttings. In the agricultural sections snows are rare, and the climate always mild.

Hon. Henry A. Bigelow, United States assessor for the Territory, residing at Prescott, writes me as follows concerning Yavapai County:

"The climate of Yavapai County is very moderate and healthy, and is not subject to great or sudden changes. In summer, say from May to November, the similarity between the climate here and that of New Hampshire is very striking; the range of the thermometrical changes, the thunder showers, and comfortably cool nights being almost identical; with this advantage, that here there are no raw easterly winds, as there. Numbers of persons who come here suffering from pulmonary complaints have become to all appearance sound and healthy.

"As an agricultural county this is not a success. A residence of nine years indicates that the county is subject to droughts of painful duration, and, through this whole county, to early and late frosts; this year a hard frost visited this whole section, July 2d, and only that land which can be irrigated is certain to produce regular crops. In favorable seasons like 1867 and 1868, immense yields of corn per acre can be produced, but for three years past the average yield has been very small. Potatoes and other vegetables yield largely and more regularly than corn.

"As a grazing county there is but one obstacle in the way, viz: that in very dry seasons, like the past year, the supply of water in the best localities grows scant for large herds; the grasses are nutritious, and cattle and sheep keep fat through the winter without extra attention or feed.

"Timber, pine, is plenty; sawed lumber is worth forty dollars per thousand at the only mill in the county.

"The mineral wealth of the county is but very little developed, but is evidently the main feature to be considered in this portion of Arizona. Veins of copper, silver, gold, and galena are each numbered by hundreds; many of them of enormous size and traceable for miles in length. It is the freely expressed opinion of mining experts who have visited our county that no section of country west of the Rocky Mountains, of the same extent, contains more mineral wealth than one hundred miles square in the center of this county."

Neither the assessor in Pima nor Yuma County gave me any *data*. In Pima the greater portion is infested by Indians, as many as eight persons having been killed by them in a single week, and robberies by them are as common as the setting of the sun. The area of farming has consequently not been much extended, and the population but little increased. The county abounds in valuable mines, many of which had to be abandoned because of Indian hostilities; and high cost of transportation, coupled with danger upon every highway, in every gulch, on every mountain, and in almost every valley and plain, prevent all attempts to work the mines, which, under fair auspices, will pay well. Yuma County is bounded west by the Colorado River, navigable along its whole west border, and hostile Indians rarely get within this county. It has shipped hundreds of tons of lead and silver ore to San Francisco, and is continuing to do



so, of which I have no statistics. The commerce of the river makes Arizona City and Ehrenberg notable points for shipping freight to the interior.

The rains of the summer have been general throughout the Territory, and began in June and extended into this month. They have been unusually large in number and quantity, and a heavy growth of grass now covers hundreds of thousands of acres, entirely destitute in dry seasons, showing but little of the land barren, as much of it is erroneously supposed to be by many, and too often so reported.

Very respectfully, your obedient servant,

JOHN WASSON,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



A.—Statement of contracts entered into by the United States surveyor general for Arizona, with deputy surveyors, for surveys of public lands during the fiscal year ending June 30, 1872, and payable out of the public appropriations for that year.

Name of deputy.	Date of contract.	Description of work.	Meridian.	Amount of contract.	Returned amount.	Amount audited.
S. W. Foreman .....	1871. May 29	Gila and Salt River meridian, between ranges 1 east and 1 west, of townships 13 and 14 north, inclusive; and between ranges 1 east and 1 west, of townships 15 and 16 north, inclusive. Second standard north, along the south boundary of township 9 north, range 5 west. Third standard north, along the south boundary of township 13 north, ranges 4, 5, and 6 west. Range line between ranges 5 and 6 west, townships 8, 9, and 10 north. Exteriors of townships 11 north, range 6 west; 13 north, ranges 1 east and 4 west; 14 north, ranges 1 east and 1, 2, and 3 west; 15 north, range 1 west. Subdivision lines of townships 10, 11, and 12 north, range 6 west; 13 north, range 1 east; 14 north, range 1 east; 14 north, ranges 1, 2, and 3 west.	Gila and Salt River .....	\$5,000 00	\$4,540 92	\$4,540 92
O. H. Case .....	July 17	Exteriors of townships 10 north, range 3 west; 11 north, ranges 3, 4, and 5 west; 12 north, range 4 west; 13 north, ranges 1 and 2 west. The Bradshaw traverse line, through townships 10 north, ranges 1 and 2 west. Subdivision lines of townships 10 north, range 3 west; 11 north, ranges 3, 4, and 5 west; 12 north, range 4 west; 13 north, ranges 1, 2, and 3 west.	.....do .....	5,000 00	4,300 71	4,300 71
S. W. Foreman .....	Aug. 7	Fourth standard north, along the south boundary of township 17 north, ranges 1, 2, 3, and 4 west. Exteriors of townships 15 north, ranges 2 and 3 west; 16 north, ranges 2, 3, and 4 west; 17 north, ranges 2, 3, and 4 west. Subdivision lines of townships 16 north, ranges 2, 3, and 4 west; 17 north, ranges 2, 3, and 4 west.	.....do .....	5,000 00	5,075 11	5,000 00
Do .....	Oct. 14	Exteriors of townships 7 north, ranges 4 and 5 west; 13 north, range 5 west. Subdivision lines of townships 7 north, ranges 4 and 5 west; 12 north, range 5 west; 13 north, ranges 4 and 5 west; 15 north, ranges 1, 2, and 3 west; 16 north, range 1 west.	.....do .....	5,000 00	4,791 29	4,789 37
Theo. F. White .....	1872. May 2	Exteriors of townships 13 south, range 14 east; 14 south, ranges 14 and 15 east; 15 south, range 14 east. Subdivision lines of township 14 south, range 14 east.	.....do .....	1,291 00		



B.—Statement of account of appropriations for the survey of public lands in Arizona during the fiscal year ending June 30, 1872.

Date of ac- count.	In favor of—	Date of con- tract.	Amount.	Date.	On account of—	Amount.
Oct. 20, 1871	S. W. Foreman...	May 29, 1871	\$4,540 92	Mar. 3, 1871	Appropriation of this date .....	\$20,000 00
Jan. 29, 1872	O. H. Case .....	July 17, 1871	4,300 71			
Feb. 15, 1872	S. W. Foreman...	Aug. 7, 1871	5,000 00			
Mar. 20, 1872	.....do .....	Oct. 14, 1871	4,789 37			
	Balance of appro- priations appli- cable to con- tracts made pre- vious to June 30, 1872 .....		1,369 00			
			20,000 00			20,000 00
				June 30, 1872	Balance of appro- priations appli- cable to con- tracts made pre- vious to June 30, 1872.....	1,369 00

C.—Account of appropriations for the salary of surveyor general of Arizona, for clerks in his office, and for incidental expenses.

DR.			CR.		
Date.	Account.	Amount.	Date.	Appropriation.	Amount.
June 30, 1872	To account of John Was- son for services as sur- veyor general for the year ending June 30, 1872.....	\$3,000 00	Mar. 3, 1871	By appropriation for compensation of sur- veyor general of Ari- zona, made this date..	\$3,000 00
June 30, 1872	To amount paid clerk and draughtsman dur- ing the year.....	3,000 00	Mar. 3, 1871	By appropriation for compensation of clerks in his office, made this date .....	3,000 00
June 30, 1872	To amount paid for in- cidentals during the year .....	1,231 44	Mar. 3, 1871	By appropriation for incidental expenses, made this date.....	3,000 00
June 30, 1872	Balance of appropriation for incidental expenses.	1,768 56			
		9,000 00			9,000 00

D.—Statement of plats made in the office of the United States surveyor general for Arizona during the fiscal year ending June 30, 1872.

Description.	Original.	Department.	Register.	Total.
Plats of meridian, standard, range, and exterior lines.....	6	6	.....	12
Plats of subdivision lines .....	28	28	28	84
Plats of town sites and mines .....	3	3	2	8
General map .....	1	1	.....	2
Total.....				106



## E.—Statement of the number of miles surveyed in Arizona during the fiscal year ending June 30, 1872.

Name of surveyor.	Date of contract.	Meridian lines.	Standard lines.	Township lines.	Section lines.	Traverse lines.	Meander lines.
		<i>Ms.chs.lks.</i>	<i>Ms.chs.lks.</i>	<i>Ms.chs.lks.</i>	<i>Ms.chs.lks.</i>	<i>Ms.chs.lks.</i>	<i>Ms.chs.lks.</i>
S. W. Foreman.....	May 27, 1871		24 0 00	6 0 00			
S. W. Foreman.....	May 29, 1871	22 0 00	14 9 50	114 33 17	262 49 25		
R. B. Kelley.....	May 31, 1871				3 33 57		2 24 74
O. H. Case.....	July 17, 1871		9 0 00	66 76 9	324 20 40	11 78 00	
S. W. Foreman.....	Aug. 7, 1871		24 0 00	92 75 43	359 78 36		
S. W. Foreman.....	Oct. 14, 1871			28 0 00	445 42 29		
Total.....		22 0 00	47 9 50	326 24 69	1,401 63 87	11 78 00	2 24 74
Grand total.....							1,811 40 80

## F.—Statement of surveys of mines in Arizona for the fiscal year ending June 30, 1872.

Date of survey.	Name of mine.	Description.	Location.
April 12, 1871.....	Flora Temple.	Lode; silver.....	Yuma County.
May 11, 1871.....	Neguilla.....	Lode; argentiferous galena.	Pima County.

## G.—List of lands surveyed in Arizona for the fiscal year ending June 30, 1872.

Description.	Meridian.	Public lands.	Unsurvey'd mountain lands.	Military reservation.
		<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Township 13 north, range 1 east .....	Gila and Salt River	15,036.48	8,000.00	
Township 14 north, range 1 east .....	do	23,014.86		
Township 14 north, range 1 west.....	do	23,019.92		
Township 14 north, range 2 west.....	do	20,143.71		2,888.00
Township 14 north, range 3 west.....	do	12,321.60	10,700.00	
Township 10 north, range 3 west.....	do	8,158.48	14,860.00	
Township 11 north, range 3 west.....	do	19,948.04	3,060.00	
Township 11 north, range 4 west.....	do	14,662.04	8,357.00	
Township 11 north, range 5 west.....	do	11,040.84	11,980.00	
Township 12 north, range 4 west.....	do	22,962.95		
Township 13 north, range 1 west.....	do	11,830.74	11,180.00	
Township 13 north, range 2 west.....	do	23,025.59		
Township 13 north, range 3 west.....	do	6,721.24	16,280.00	
Township 16 north, range 2 west.....	do	22,980.02		
Township 16 north, range 3 west.....	do	22,973.29		
Township 16 north, range 4 west.....	do	22,980.58		
Township 17 north, range 2 west.....	do	23,048.98		
Township 17 north, range 3 west.....	do	23,047.23		
Township 17 north, range 4 west.....	do	23,038.26		
Township 7 north, range 4 west.....	do	18,727.81	4,300.00	
Township 7 north, range 5 west.....	do	22,084.62	960.00	
Township 12 north, range 5 west.....	do	5,280.46	17,750.00	
Township 13 north, range 4 west.....	do	20,330.90	2,700.00	
Township 13 north, range 5 west.....	do	19,683.82	3,350.00	
Township 15 north, range 1 west.....	do	22,993.40		
Township 15 north, range 2 west.....	do	22,996.01		
Township 15 north, range 3 west.....	do	12,140.81	10,900.00	
Township 16 north, range 1 west.....	do	22,979.18		
Total.....		517,171.86	124,377.00	2,888.00



H.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Tucson, Arizona Territory, July 10, 1872.*

SIR: Referring to your circular of date April 5, 1872, regarding estimates for the surveying service in this district for the fiscal year ending June 30, 1874, I have the honor to submit the following:

For surveying extensions of meridian, standard parallel, township exterior, and subdivision lines of public surveys.....	\$30,000 00
For salary of surveyor general.....	3,000 00
For salary of clerks in office .....	4,000 00
For rent, fuel, and other incidentals.....	2,500 00
Total of estimates.....	<u>39,500 00</u>

These estimates are the same as those for the previous fiscal year, and in view of the small appropriation for public surveys in this district for the fiscal year ending June 30, 1873, the amount for this purpose is deemed moderate to meet the reasonable public wants before the close of the period for which it will be applicable.

There is a large area of timber in the aggregate in this district, and but a trifling part of it is surveyed and available for pre-emption or purchase, hence it is being cut off by settlers and lumbermen, to a manifest loss to the Government; and it is but just to say that at least all parties who to any considerable extent thus strip this class of land of its chief value, without title from or compensation to the United States, would greatly prefer to legally acquire title to it, in advance of occupation for any purpose.

Settlers must and will have timber, and sound public policy, whether viewed in the light of economy to the Government, or placing it within the power of settlers to properly acquire what necessity demands for them, seems to require that the lines of public surveys be extended over the timber tracts at the earliest practicable time; and if this position be correct, very much more than the whole amount of the above estimate should be appropriated for this purpose alone.

The amounts estimated for clerical service and incidental expenses are just those actually necessary to conduct the ordinary business of the office; therefore I trust these, as well as that for public surveys, may receive your approval.

Very respectfully, your obedient servant,

JOHN WASSON,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*

K.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Tucson, Arizona Territory, July 24, 1872.*

SIR: I would respectfully invite your attention to the necessity of a resurvey of the Pima and Maricopa Indian reservation within this surveying district, and the Indian superintendency of Arizona, and for these reasons: Contiguous to the lower or western line of said reservation are actual settlers who have been such for several years, and are anxious to have the public surveys extended over lands in their vicinity, and under my general instructions it is my duty to accommodate them. The settlers were among the first to solicit surveys after the establishment of this district. That I might accommodate them, I have for more than a year been seeking for a copy of the approved plat and field notes of the legal survey of said reservation, but without success, further than to get a copy of a plat purporting to be the approved one. Even if this copy be true, I am without field notes, and so I understand is the office of the Commissioner of Indian Affairs; and I am also advised that the office of the superintendent of Indian affairs for this Territory is without field notes. In consequence of the indistinct and partly unknown boundaries of said reserve, and the importance of their being more clearly defined, the United States district attorney for Arizona, under date of July 31, 1871, officially applied to me for a resurvey thereof, but having neither authority nor funds for such work, I declined to act. The issue of an important suit, (The United States, plaintiff and appellant, *vs.* Certain property, William Richard & Co., respondents,) regarding the execution of the Indian intercourse laws, now appealed to the Supreme Court of the United States, was principally involved in the question of where the south boundary of said reservation actually run; and the same uncertainty exists about other portions of the line. Therefore, to make it possible to correctly extend the public surveys over the adjoining lands, as well as to assist in the adjustment of con-



troversies arising, and continually liable to arise, in executing the laws regarding intercourse with the Indians, it is of great importance to have an official resurvey of said reservations made at the earliest practicable time.

The necessity for such survey, I have no doubt, will be cheerfully indorsed by the superintendent of Indian affairs for Arizona, as well as by the United States district attorney. The absence of the former from the superintendency, and the latter being 300 miles away in a distant part of the Territory, prevent me from presently procuring such indorsement.

Presuming that the resurvey should be made at the instance and expense of the office of the Commissioner of Indian Affairs, I have this day transmitted a copy of this letter to General Francis A. Walker, Commissioner, with a letter specially inviting his attention to the subject as herein presented.

Very respectfully, your obedient servant,

JOHN WASSON,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*

### N.—*Report of the surveyor general of California.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*San Francisco, California, October 1, 1872.*

SIR: In compliance with your instructions, I have the honor to submit, in duplicate, the annual report of this office, in relation to the surveying service of California during the fiscal year ending June 30, 1872.

I also forward the tabular statements, as follows:

A. Statement of contracts entered into by the surveyor general for California with deputy surveyors for surveys of public lands during the fiscal year 1871-'72, and payable out of the public appropriation for the fiscal year.

B. Statement of contracts entered into by the United States surveyor general for California with deputy surveyors for surveys of public lands during the fiscal year 1871-'72, and payable out of the private deposits made in conformity with the act of May 30, 1862, and March 3, 1871.

C. Statement of surveys of mines in California for the fiscal year 1871-'72, made in conformity with the acts of Congress approved July 26, 1866, July 9, 1870, and May 10, 1872.

D. Statement showing the number of miles surveyed in California to June 30, 1872.

E. List of lands surveyed in California from June 30, 1871, to June 30, 1872.

F. Statement of plats made in the office of the surveyor general for California during the fiscal year 1871-'72.

G. Statement of transcripts of field notes of public surveys sent to the Department at Washington from the office of United States surveyor general for California during the fiscal year 1871-'72.

H. Statement of descriptive notes, decrees of court, &c., of private land claims to accompany plats for patents compiled for transmission to the Department at Washington during the fiscal year 1871-'72.

I. Statement of special deposits for the survey of public lands in California during the fiscal year 1871-'72.

J. Statement of special deposits for the survey of mining claims in California during the fiscal year 1871-'72.

K. Statement of account of appropriation for the survey of public lands in California during the fiscal year 1871-'72.

L. Statement of account of appropriation for office rent, stationery, pay of messenger, and incidental expenses of the office of the United States surveyor general for California for the fiscal year ending June 30, 1872.

M. Account of appropriations for the salary of surveyor general for California for the fiscal year ending June 30, 1872.

N. Statement of account of appropriation for compensation of clerks and draughtsmen in office of United States surveyor general for California for the fiscal year ending June 30, 1872.

O. Statement, of special individual deposits with the United States assistant treasurer at San Francisco during the fiscal year 1871-'72—for compensation of clerks and draughtsmen in office of the United States surveyor general for California.

P. Statement of the special deposit account for the fiscal year 1871-'72.

Q. Estimate for the surveying service in the district of California for the fiscal year ending June 30, 1874.



## SURVEYS OF SPANISH GRANTS.

Since my last annual report some progress has been made in this branch of the business of the office. However, delays still occur from the causes mentioned in my last report.

There are still a number of cases which require re-advertisement under the law of 1864; and although the owners of the ranchos, as far as they could be ascertained, have been notified, they have been slow in making the necessary deposits to have the cases advertised and prepared for Washington. I reiterate the statement made in my last annual report in relation to the suspension of public lands from entry on account of unsettled Spanish grants. In many cases these causes naturally retard the settlement and prosperity of the country.

## SURVEYS OF PUBLIC LANDS.

The principal portion of the appropriation for the fiscal year 1871-'72 has been expended in the counties of Lassen and Siskiyou, situated in the northern part of the State; besides which, two townships have been surveyed in Tehama County, three in Napa, and seven in Monterey.

I beg leave again to call your attention to the tract of country embracing what are known as the western foot-hills of the Sierra Nevada Mountains, and to suggest the propriety of graduating the price of land in this section in proportion to its value, and also that of the poorer quality, that settlers be permitted to pre-empt more than one hundred and sixty acres.

## SWAMP AND OVERFLOWED LANDS.

It is shown by the report that a large amount of land has been listed to the State of California as swamp and overflowed land under the act of 1866. Since I have been in office I have made examinations in relation to tracts, embracing altogether an area of 81,280 acres, and I have now two appointments for like investigations, and these will embrace all the swamp land that the State authorities have claimed as such up to the present date.

## SURVEYS OF MINING CLAIMS.

Business in this department has greatly increased during the last year, ninety-two surveys having been completed during the year, as shown by the accompanying statement. This is a large increase over the preceding year, during which but twenty-five surveys were completed; and it will be seen by the statement that, during the month of June last, eighteen surveys were completed. This is nearly as many as were made during the whole of the preceding year. Many controversies arise in the mineral regions of the State between the mining and agricultural interests, and in some cases difficulties are found in segregating the mineral lands, which greatly embarrass the land officer of the district in which the lands are included.

In view of these difficulties, and to some extent to remedy the same, I would suggest that a commission be created, composed of the surveyor general, or one of his deputies, and the register or receiver of the land office of the district in which the land is situated, whose duty it shall be to make a careful personal examination of the character of the lands, for the purpose of determining what are mineral and what are agricultural, and to segregate the one from the other, and that the expenses of this commission be paid by the Government.

## AGRICULTURE, COMMERCE, ETC.

This season in California has been more than ordinarily fruitful. The wheat crop is the largest and finest ever harvested in the country, the yield being a high average, and the grain plump, heavy, and of a fine color.

The total crop is estimated at 23,333,333 bushels, of 60 pounds, valued at \$1 per bushel. It is estimated that the surplus for shipment will amount to 500,000 tons, equal in value to \$16,500,000.

This estimate is considered moderate. By some it is placed as high as 26,666,666 bushels.

The barley and oat crop is smaller than usual, owing to the late rains, the joint value of both being about \$2,750,000.

San Francisco has steam communication thrice monthly with Panama and the South American ports; once a month with the Mexican ports; after the 1st of January next, twice a month to China, and also a monthly line to the Sandwich Islands and Australia.

Much attention is being given to the subject of irrigation, particularly in the southern portions of the State, since it is found whenever lands can be irrigated good crops can be produced in any kind of a season.



A large canal is being made by a company, for the purpose of irrigating a portion of the San Joaquin Valley; and in the counties of Santa Barbara, Los Angeles, and San Bernardino numerous works of this kind have been executed, or are in progress and contemplation, for the purpose of utilizing the waters of the various streams found in the country.

#### WINE AND WOOL.

These are very important interests to California, and are every year increasing in magnitude.

The grape crop this season has been very abundant, and the present vintage will produce a large amount of wine for exportation. Much attention is now being given to the improvement of the quality of the wines manufactured in California, and it is thought by intelligent vine culturists that before a great while California, in the quality of her wines, will rival those produced by the vineyards of Europe. A fine quality of champagne is being extensively manufactured on the vineyard of Buena Vista, in the county of Sonoma. This is one of the largest vineyards in the world, embracing an area of nearly five hundred acres; and is owned by a stock company.

The wool product of the country, as shown by statistics, is steadily on the increase, and it is found by experience that the climate, soil, and topographical features of this coast are peculiarly favorable to the production of wool in large quantities and of a very fine quality.

Much attention has been given by wool growers to the improvement of the different breeds of sheep, so that at present the old Mexican stock have almost entirely disappeared, giving place to improved breeds which have been imported from the East and from Europe. California is now receiving a large revenue from the exportation of wool, and which will doubtless continue to increase for some time to come, and besides this a considerable business is done in the way of manufacturing the fabrics wrought, particularly the blankets being of a very fine quality. I have no doubt but that the time will come when California will be as much celebrated for the manufacture of woollen fabrics as are some of the cities of the olden times.

#### RAILROADS.

The construction of railroads, building of depots, &c., are being pressed forward with energy.

From the 30th of June, 1871, to the 1st of October, 1872, on the Oregon branch of the Central Pacific, 48.25 miles have been constructed; on the San Joaquin division 126.30 miles; and on the San Francisco and North Pacific, 18 miles.

Large sums of money have been expended in San Francisco in the construction of depots, warehouses, and a new slip for car ferry landing; the depot buildings are substantial and commodious, and no expense has been spared in their construction; in the depot yard and Mission Bay  $6\frac{3}{4}$  miles of track have been laid.

During the year surveys have been made on the Central Pacific and branches: On the Oregon division, 325 miles; on the San Joaquin division, preliminary and final location, 360 miles; on the San Pablo and Tulare, 329 miles; preliminary surveys between Sacramento and Red Bluff, west side of Sacramento River, 194 miles; San Francisco and North Pacific, preliminary and location surveys, 285 miles; preliminary examinations of various lines not included in above statement, 186 miles. Reconstruction of the California Pacific Railroad between Sacramento and Davisville, of which nearly five miles were destroyed by last winter's floods. The new work will comprise nearly one mile of pile trestle work, and four miles of embankment of an average height of eight feet, and about 16 miles of breakwater fence.

It is expected that these repairs will be completed before the commencement of the winter storms.

On the main line of the Central Pacific Railroad, near Clippe Gap, a tunnel is being constructed 600 feet in length, and an embankment requiring 90,000 cubic yards of material, which will be completed within a few months.

This work is being done in place of reconstructing the trestle bridge at this point; an improvement in the alignment will be affected by this change, and also in the safety of transit.

It is probable that all the uncompleted lines will be extended as far as the business of the country will warrant.

On the main line of the Southern Pacific Railroad 117.60 miles have been constructed, to wit: from San Francisco to Salinas City, in the direction of the Colorado River.

All of which is respectfully submitted.

J. R. HARDENBERGH,  
*United States Surveyor General for California.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



A.—Statement of contracts entered into by the United States surveyor general for California, with deputy surveyors, for surveys of public lands during the fiscal year 1871-'72, and payable out of the public appropriation for that fiscal year.

Name of deputy.	Date of contract.	Character and location of work.	Meridian.	Amount of contract.	Returned amount.	Remarks.
Wilfred F. Ingalls .....	June 15, 1871	Exterior and subdivision lines of township 41 north, ranges 8, 9, 10, 11, 12, and 13 east; township 42 north, ranges 8, 9, 10, 11, 12, and 13 east; township 43 north, ranges 10, 11, 12, and 13 east.	Mt. Diablo.....	\$15,000 00	\$12,582 68	Surveys completed, approved, and paid for; plats and field notes transmitted.
John M. Ingalls .....	June 15, 1871	Exterior and subdivision lines of townships 33, 34, and 35 north, range 6 east; townships 31, 32, 33, 34, and 35 north, range 7 east; townships 31, 32, 33, and 34 north, range 8 east; townships 31, 32, 33, 34, and 35 north, range 9 east.	....do .....	15,000 00	12,701 70	Do.
John C. Partridge.....	June 25, 1871	Exterior and subdivision lines of townships 41, 42, and 43 north, range 14 east; township 37 north, range 14 east; township 36 north, range 9 east.	....do .....	5,000 00	3,236 92	Surveys completed and approved; plats and field notes transmitted; account audited.
Alexander McKay.....	July 15, 1871	Exterior and subdivision lines of township 43 north, ranges 8 and 9 east; township 44 north, ranges 11, 12, and 13 east; township 45 north, ranges 11, 12, and 13 east; township 46 north, ranges 11 and 12 east; township 47 north, ranges 11, 12, and 13 east.	....do .....	11,000 00	9,988 58	Do.
George Small .....	July 15, 1871	Exterior and subdivision lines of township 33 north, ranges 10 and 11 east; township 34 north, ranges 11, 13, and 14 east; township 35 north, ranges 11, 12, and 13 east.	....do .....	7,000 00	5,998 52	Do.
John C. Partridge.....	July 20, 1871	Northern boundary of township 36 north, ranges 15, 16, and 17 east; exterior and subdivision lines of township 33 north, range 13 east; township 34 north, range 10 east; township 35 north, ranges 8 and 10 east; township 36 north, ranges 8 and 10 east; township 37 north, ranges 9 and 15 east; township 40 north, ranges 11 and 13 east.	....do .....	9,000 00	6,947 10	Do.
William H. Carlton ....	Aug. 1, 1871	Exterior and subdivision lines of township 29 north, ranges 3 and 4 east.	....do .....	2,000 00	.....	Surveys completed, but not approved; plats and field notes ready for transmission.
William Minto.....	Aug. 9, 1871	Extension of the ninth standard 12 miles; northern boundary of township 43 north, ranges 14 and 15 east, and exterior and subdivision lines of township 40 north, range 12 east; township 39 north, range 13 east; townships 38, 44, 45, and 46 north, range 14 east.	....do .....	5,000 00	4,046 90	Surveys completed and approved; plats and field notes transmitted; account audited.
Isaac N. Chapman .....	Nov. 7, 1871	Subdivision lines of township 9 north, ranges 4 and 5 west.	....do .....	1,350 00	863 71	Do.
Isaac N. Chapman .....	Dec. 11, 1871	Completion of the subdivision lines of township 7 north, range 2 west.	....do .....	400 00	172 91	Do.



## [ A.—Statement of contracts entered into by the United States surveyor general for California, &amp;c.—Continued.

Name of deputy.	Date of contract.	Character and location of work.	Meridian.	Amount of contract.	Returned amount.	Remarks.
William Minto.....	Apr. 9, 1872	Exterior and subdivision lines of township 47 north, range 14 east; townships 46 and 47 north, range 15 east.	Mt. Diablo.....	\$800 00	.....	Surveys completed and approved; township 47 north, range 15 east, returned as unsurveyable; plats of the remaining townships have been made; field notes being copied.
William Minto .....	Apr. 15, 1872	Exterior and subdivision lines of township 48 north, range 14 east.	....do .....	200 00	.....	Surveys completed and approved; plats made; field notes being copied.
Eben H. Dyer.....	May 1, 1872	Exterior and subdivision lines of township 21 south, ranges 3 and 4 east; township 22 south, ranges 3 and 4 east.	....do .....	1,000 00	\$799 29	Surveys completed and approved; plats and field notes transmitted.
Wilfred F. Ingalls .....	May 1, 1872	Exterior and subdivision lines of township 48 north, range 5 east; townships 46, 47, and 48 north, range 6 east.	....do .....	3,000 00	.....	Surveys completed, but returns not yet made by deputy.
F. L. Ripley.....	June 6, 1872	Subdivision lines of township 16 south, range 1 east; township 17 south, ranges 1 and 2 east.	....do .....	900 00	.....	Surveys completed and returns made; field notes in the hands of the draughtsman.
Ephriam Dyer .....	June 26, 1872	Exterior and subdivision lines of township 27 north, ranges 1, 2, and 3 east; township 28 north, ranges 2 and 3 east.	....do .....	4,500 00	.....	Deputy in the field.

J. R. HARDENBERGH,  
United States Surveyor General for California.



B.—Statement of contracts entered into by the United States surveyor general for California, with deputy surveyors, for surveys of public lands during the fiscal year 1871-'72, and payable out of private deposits made in conformity with the acts of May 30, 1862, and March 3, 1871.

Name of deputy.	Date of contract.	Character and location of work.	Amount of contract.	Returned amount.	Depositors.	Remarks.
Isaac N. Chapman ...	July 21, 1871	East boundary and subdivision lines of Tp. 15 N., R. 8 W., Mt. Diablo mer.	\$187 00	\$187 00	Green Bartlet.....	Surveys completed and approved; plats and field notes transmitted; account audited.
Henry F. Terry .....	July 22, 1871	Subdivision of the surveyable portion of Tp. 5 N., R. 15 E., Mt. Diablo mer.	168 00	168 00	John Perry .....	Do.
Elias J. Edwards .....	Aug. 11, 1871	Completion of the subdivision lines of Tp. 18 N., R. 4 W., Mt. Diablo mer.	50 00	50 00	Frank Staples .....	Do.
Henry F. Terry .....	Aug. 22, 1871	Portion of the exterior and subdivision lines of Tp. 5 N., R. 16 E., Mt. Diablo meridian.	171 00	171 00	Sperry & Perry .....	Do.
Denton D. Brown ....	Sept. 19, 1871	Exterior and subdivision lines of Tp. 21 N., R. 14 E., Mt. Diablo meridian.	189 00	189 00	Peter Schults and C. D. Wycoff..	Do.
Denton D. Brown ....	Instructions of Sept. 19, 1871.	Line between sections 34 and 35, of Tp. 8 N., R. 2 W., Mt. Diablo meridian.	10 00	10 00	Henry Seaman.....	Do.
William Magee .....	Sept. 20, 1871	Completion of the subdivision of Tp. 26 N., R. 4 W., Mt. Diablo meridian.	256 00	215 38	Isaac Ramba and Jacob Ramba..	Do.
H. S. Smith .....	Sept. 26, 1871	Exterior and subdivision lines of Tp. 14 N., R. 7 W., Mt. Diablo meridian.	250 00	178 50	E. A. Rowe and W. F. Rowe.....	Do.
Jarvis Kiel .....	Oct. 5, 1871	Subdivision of Tp. 5 S., R. 21 E., Mt. Diablo meridian.	600 00	.....	Hogan, Moore, G. A. Clarke & G. Clarke.	Deputy in the field; time for completion extended.
Jarvis Kiel .....	Oct. 19, 1871	Subdivision of Tp. 5 S., R. 20 E., Mt. Diablo meridian.	600 00	.....	Thompson, Magoon, J. Westfall <i>et al.</i>	Do.
Walter I. Rumble....	Oct. 19, 1871	Subdivision of Tp. 12 S., R. 1 W., San Bernardino meridian.	360 00	263 01	Hiram Manasse and Moses Manasse.	Surveys completed, approved, and paid for; plats and field notes transmitted.
Isaac N. Chapman ...	Nov. 7, 1871	Completion of the subdivision of Tp. 8 N., R. 3 W., Mt. Diablo meridian.	80 00	.....	George Davis .....	Surveys completed and returned; not platted; awaiting order.
Isaac N. Chapman ...	Nov. 11, 1871	Exterior and subdivision lines of Tp. 11 N., R. 6 W., Mt. Diablo meridian.	350 00	350 00	Pleasant Smith, W. R. Matthews, guardian.	Surveys completed and approved; plats and field notes transmitted; account audited.
Henry F. Terry .....	Nov. 13, 1871	Completion of the subdivision of Tp. 5 N., R. 15 E., Mt. Diablo meridian.	150 00	150 00	Freeman Dunbar and Willis Dunbar.	Do.
William J. Lewis ....	Nov. 14, 1871	Exterior and subdivision lines of Tps. 17 S., Rs. 11 and 12 E., Mt. Diablo mer.	1,008 00	375 21	G. and J. Ashurt <i>et al.</i> .....	Do.
Robert R. Harris.....	Dec. 5, 1871	Exterior and subdivision lines of Tp. 32 S., R. 16 E., Mt. Diablo meridian.	634 00	375 39	J. M. Lopez, Levi Racliffe, and Lorenzo Moreno.	Do.
John Reed .....	Dec. 9, 1871	Subdivision of Tp. 6 S., R. 1 E., Mt. Diablo meridian.	35 00	12 14	Joseph Merritt .....	Do.
Hubbard Savage .....	Jan. 2, 1872	Exterior and subdivision lines of Tp. 17 N., Rs. 13 and 14 W., Mt. Diablo mer.	642 00	.....	H. C. Casey, C. D. Osborne <i>et al.</i> ..	Surveys completed and approved; field notes platted.
Thomas W. Wright..	Jan. 31, 1872	To subdivide fractional Tp. 11 S., R 1 E., Mt. Diablo meridian.	10 00	.....	Riely Blackford .....	Do.



B.—Statement of contracts entered into by the United States surveyor general for California, with deputy surveyors, &c.—Continued.

Name of deputy.	Date of contract.	Character and location of work.	Amount of contract.	Returned amount.	Depositors.	Remarks.
Robert R. Harris ....	Feb. 5, 1872	To complete the subdivision of Tp. 30 S., R. 13 E., Mt. Diablo meridian.	\$36 00	\$36 00	P. W. Murphy.....	Surveys completed and approved; plats and field notes transmitted; account audited.
William Magee .....	Feb. 12, 1872	Exterior and subdivision lines of Tp. 33 N., R. 6 W., Mt. Diablo meridian.	72 00	72 00	William McKaig.....	Do.
William P. Reynolds.	Feb. 13, 1872	Subdivision of Tp. 6 S., R. 8 W., San Bernardino meridian.	240 00	.....	John Hawton and Thomas M. Pursell.	Surveys completed; field notes delivered to draughtsmen for examination.
Thomas J. Dewoody .	Mar. 8, 1872	Completion of the subdivision of Tp. 7 N., R. 6 W., Mt. Diablo meridian.	20 00	.....	P. E. Wicks .....	No returns yet made by deputy.
William P. Reynolds.	Mar. 15, 1872	Completion of the subdivision of Tp. 1 S., R. 13 W., San Bernardino mer.	115 00	.....	David Urmsted and H. S. Parcels.	Surveys completed; field notes delivered to draughtsmen for examination.
William P. Reynolds.	Mar. 19, 1872	Subdivision of a portion of Tp. 3 N., R. 17 W., San Bernardino meridian.	308 00	.....	R. S. Baker .....	No returns yet made by deputy.
William H. Norway..	Mar. 19, 1872	Subdivision of Tp. 6 N., R. 32 W., San Bernardino meridian.	548 55	548 55	Ramon de la Cuesta.....	Surveys returned and approved; plats and field notes transmitted.
A. H. Parker .....	Mar. 19, 1872	Exterior and subdivision lines of Tp. 15 S., R. 6 E., Mt. Diablo meridian.	516 00	.....	Charles Frederick and Frank Hart.	Surveys returned and approved; field notes platted; transcripts being made.
T. A. Talleyrand.....	Mar. 25, 1872	Completion of the subdivision of Tp. 1 N., R. 1 W., Mt. Diablo meridian.	25 00	.....	H. C. Benson.....	Field notes returned to deputy for correction.
E. H. Marshall.....	Mar. 28, 1872	Completion of the subdivision of Tp. 7 N., R. 2 W., Mt. Diablo meridian.	15 00	14 96	J. M. Pleasants .....	Surveys completed and approved; plats and field notes transmitted; account audited.
Ezra Carpenter .....	Mar. 29, 1872	Completion of the subdivision of Tp. 29 S., R. 19 E., Mt. Diablo meridian.	225 00	.....	F. R. Cordosa .....	Surveys completed and approved; original map made.
William A. Pierce ...	Apr. 5, 1872	Completion of the subdivision of Tp. 7 N., R. 4 W., Mt. Diablo meridian.	10 00	.....	T. J. Tucker.....	Surveys completed and approved; field notes platted, and transcript made.
A. M. Jones.....	Apr. 9, 1872	Exterior boundaries of the town site of "Yreka," in Tp. 45 N., R. 7 W., Mt. Diablo meridian.	67 50	.....	Town trustees of "Yreka" .....	Surveys completed; field notes on file awaiting order for examination.
Isaac N. Chapman ...	Apr. 15, 1872	Exterior and subdivision lines of Tp. 9 N., R. 11 W., Mt. Diablo meridian.	42 00	.....	R. H. Gilman .....	Do.
Calvin P. Bailey.....	Apr. 23, 1872	East boundary and subdivision of Tp. 17 S., R. 6 E., Mt. Diablo meridian.	16 60	.....	Benjamin Bushell.....	Returns not yet made by deputy.
A. M. Jones.....	May 1, 1872	Exterior boundaries of the town site of "Rough and Ready," in Tp. 42 N., R. 9 W., Mt. Diablo meridian.	60 00	.....	Inhabitants of "Rough and Ready."	Surveys completed; field notes on file awaiting order for examination.
William Magee .....	Instructions of May 8, 1872.	Exterior and subdivision lines of Tp. 31 N., R. 1 W., Mt. Diablo meridian.	52 00	47 13	Erastus Wagner .....	Surveys completed and approved; plats and field notes transmitted; account audited.
William Magee .....	May 20, 1872	Exterior and subdivision lines of Tp. 33 N., Rs. 7, 8, and 9 W., Mt. Diablo mer.	632 00	509 50	George W. Davis, John Taylor, et al.	Do.
Hubbard Savage .....	May 20, 1872	Exterior and subdivision lines of Tp. 13 N., R. 12 W., Mt. Diablo meridian.	776 00	.....	Espey & McNab, Alex. McNab, and G. T. Espey.	Surveys completed and approved; field notes platted and returned to clerks for copying.



George Tucker .....	May 21, 1872	Exterior and subdivision lines of Tp. 13 N., R. 10 W., Mt. Diablo meridian.	222 00	.....	Michael Manning and Thomas Manning.	Surveys completed and approved; field notes platted and returned to clerks for copying.
George B. Tolman....	June 3, 1872	Exterior and subdivision lines of Tps. 24 and 25 S., R. 6 E., Mt. Diablo mer.	600 00	.....	Ezekiel Tripp, D. K. Tripp, Varnum Westcott, and W. Cruickshanks.	Surveys completed and returns made; field notes on file awaiting order for examination.
George B. Tolman....	June 5, 1872	Subdivision of Tp. 16 S., R. 1 W., Mt. Diablo meridian.	290 00	.....	Robert and John Martin .....	Surveys completed; field notes on file awaiting order for examination.
William S. Powell....	June 10, 1872	Completion of the exterior and subdivision lines of Tp. 20 S., R. 27 E., Mt. Diablo meridian.	273 75	.....	Francis M. Kibler .....	Surveys completed; field notes returned to deputy for correction.

J. R. HARDENBERGH,  
*United States Surveyor General for California.*



C.—Statement of surveys of mines in California for the fiscal year 1871-'72, made in conformity with the acts of Congress approved July 26, 1866, and July 9, 1870.

Approval of survey.	Name of mine.	Location.
Aug. 22, 1871....	Picayune Placer Mine, (Geo. Grant <i>et al</i> ).....	Nevada County.
Sept. 12, 1871....	Mayflower Quartz Mine .....	Amador County.
Sept. 15, 1871....	Keystone Gold Quartz Mine .....	Do.
Sept. 18, 1871....	Red Hill Quicksilver Mine .....	Napa County.
Sept. 26, 1871....	Original Amador Quartz Mine .....	Amador County.
Sept. 26, 1871....	Spring Hill and Geneva Quartz Mine .....	Do.
Sept. 27, 1871....	Bunker Hill Gold Quartz Mine.....	Do.
Sept. 28, 1871....	Lincoln Quartz Mine South .....	Do.
Oct. 6, 1871....	Oakville Quicksilver Mine .....	Napa County.
Oct. 31, 1871....	Red Hill Placer Mine .....	Tuolumne County.
Nov. 11, 1871....	Town Talk Placer Mine .....	Nevada County.
Nov. 11, 1871....	Manzanita Placer Mine .....	Do.
Nov. 23, 1871....	Dry Creek Gold Quartz Mine .....	Amador County.
Nov. 24, 1871....	Simpson and Aden Gold Quartz Mine .....	Do.
Nov. 25, 1871....	Stanislaus Gold Quartz Mine.....	Calaveras County.
Nov. 28, 1871....	Fort John Gold Quartz Mine.....	Amador County.
Dec. 2, 1871....	Washington Gold Quartz Mine.....	Plumas County.
Dec. 5, 1871....	Luetje and Schwartz Placer Mine.....	Nevada County.
Dec. 9, 1871....	Southerland Gold Quartz Mine.....	Amador County.
Dec. 16, 1871....	Wild Cat Placer Mine .....	Do.
Dec. 19, 1871....	Enterprise Gold Quartz Mine.....	Calaveras County.
Dec. 21, 1871....	Pioneer Gold and Silver Quartz Mine .....	Amador County.
Dec. 21, 1871....	Newton Copper Mine .....	Do.
Dec. 22, 1871....	Staples & Co.'s Placer Mine.....	El Dorado County.
Dec. 27, 1871....	S. Bright Gold Quartz Mine.....	Amador County.
Dec. 27, 1871....	Cederberg Gold Quartz Mine.....	El Dorado County.
Dec. 28, 1871....	Saint Lawrence Gold Quartz Mine .....	Do.
Dec. 30, 1871....	Union Co.'s Gold Quartz Mine .....	Calaveras County.
Jan. 10, 1872....	Eclipse Gold Quartz Mine .....	Amador County.
Jan. 12, 1872....	Reserve Gold Quartz Mine.....	Calaveras County.
Jan. 17, 1872....	Santa Cruz Gold Quartz Mine.....	Do.
Jan. 17, 1872....	Norambagua Gold Quartz Mine .....	Nevada County.
Jan. 20, 1872....	Pond & Constable Placer Mine .....	Placer County.
Jan. 29, 1872....	Dutch Flat and Franklin Placer Mine .....	Do.
Feb. 2, 1872....	Crane's Gulch Placer Mine .....	El Dorado County.
Feb. 6, 1872....	South Yuba Canal Co's Placer Mine.....	Nevada County.
Feb. 8, 1872....	Red Hill Placer Mine .....	Calaveras County.
Feb. 9, 1872....	Dikeman Placer Mine.....	Nevada County.
Feb. 12, 1872....	Rocky Bend Gold Quartz Mine.....	El Dorado County.
Feb. 13, 1872....	Baltic Placer Mine .....	Nevada County.
Feb. 14, 1872....	Hilton & McPherson Placer Mine.....	Tuolumne County.
Feb. 15, 1872....	Richard's Placer Mine .....	Do.
Feb. 16, 1872....	McMullan & Reese Placer Mine.....	Shasta County.
Feb. 19, 1872....	Rising Hope Placer Mine.....	El Dorado County.
Feb. 20, 1872....	North Fork and Bear River Placer Mine .....	Placer County.
Feb. 23, 1872....	Georgia Slide Placer Mine, (D. W. Cary) .....	El Dorado County.
Feb. 24, 1872....	Nisbet Gold Quartz Mine .....	Butte County.
Feb. 28, 1872....	Bradley & Gardner Placer Mine .....	Placer County.
Mar. 13, 1872....	Harmony Co.'s Placer Mine.....	Nevada County.
Mar. 13, 1872....	Moorehouse Gold Quartz Mine .....	Do.
Mar. 18, 1872....	Lone Jack Quartz Mine.....	Do.
Mar. 26, 1872....	Sailor, or Brown & Co.'s, Placer Mine.....	Placer County.
Mar. 26, 1872....	Weske Placer Mine.....	Do.
Mar. 28, 1872....	Sliger Gold Quartz Mine.....	El Dorado County.
April 1, 1872....	Elmore Hill Placer Mine.....	Placer County.
April 1, 1872....	Dead Head Placer Mine .....	El Dorado County.
April 2, 1872....	Bear River Placer Mine.....	Placer County.
April 5, 1872....	Banghart Gold Quartz Mine .....	Shasta County.
April 6, 1872....	Diltz Gold Quartz Mine.....	Mariposa County.
April 9, 1872....	Gover Gold Quartz Mine.....	Nevada County.
April 11, 1872....	Powell Placer Mine.....	Placer County.
April 11, 1872....	Calaveras Copper Mine .....	Calaveras County.
April 13, 1872....	Bobby Burns Gold Quartz Mine.....	El Dorado County.
April 16, 1872....	Tecumseh Gold, Silver, and Copper Mine.....	Calaveras County.
April 19, 1872....	Tyson Iron and Copper Mine .....	Tuolumne County.
April 20, 1872....	Spagnoli Gold Quartz Mine.....	Amador County.
April 25, 1872....	Everlasting Gold Quartz Mine .....	Calaveras County.
April 29, 1872....	Sargent & Jacob's Placer Mine .....	Nevada County.
May 1, 1872....	Keystone Placer Mine .....	Do.
May 6, 1872....	Wisconsin Gold Quartz Mine .....	Do.
May 20, 1872....	Independence Gold Quartz Mine.....	Sierra County.
May 21, 1872....	Franklin Miner Placer Mine.....	Placer County.
May 28, 1872....	Red Hill Placer Mine .....	Do.
June 3, 1872....	Clyde Gold Quartz Mine .....	Amador County.
June 4, 1872....	Summit Gold Quartz Mine .....	Do.
June 5, 1872....	Mutual Placer Mine .....	Placer County.
June 10, 1872....	North Star Gold Quartz Mine.....	Amador County.
June 12, 1872....	Railroad Placer Mine .....	El Dorado County.
June 13, 1872....	O'Brien & Tulley Placer Mine .....	Do.



## C.—Statement of surveys of mines in California, &amp;c.—Continued.

Approval of survey.	Name of mine.	Location.
June 14, 1872....	Olsen & Donaldson Placer Mine .....	El Dorado County.
June 15, 1872....	Finn Placer Mine.....	Tuolumne County.
June 17, 1872....	Shoemaker Placer Mine.....	El Dorado County.
June 18, 1872....	Rowe & Co.'s Placer Mine .....	Do.
June 19, 1872....	Sailor Slide Placer Mine.....	Do.
June 20, 1872....	Murchie Placer Mine .....	Nevada County.
June 26, 1872....	Pennsylvania Quicksilver Mine.....	Monterey County.
June 26, 1872....	Don Juan Quicksilver Mine .....	Do.
June 26, 1872....	Don Miguel Quicksilver Mine.....	Do.
June 26, 1872....	New York Quicksilver Mine .....	Do.
June 26, 1872....	Hazard Gold Quartz Mine.....	Amador County.
June 27, 1872....	Nevada Gold Quartz Mine .....	Do.
June 29, 1872....	El Dorado Gold Quartz Mine .....	Do.

J. R. HARDENBERGH,  
United States Surveyor General for California.



## D.—Statement of number of miles surveyed in California during the fiscal year 1871-'72.

Name of surveyor.	Date of contract.	Base.	Meridian.	Standard.	Traverse.	Meander.	Township.	Section.
		<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>
Miles surveyed to June 30, 1871, as per last report.....		358 4 50	753 18 45	4,563 79 82	2,755 59 34	1,037 25 35	24,503 72 88	95,860 33 71
Max Strobel .....	June 22, 1868			5 50		5 14 39		8 04 60
Hiram Austin .....	June 24, 1869					3 24 05		
A. Leon Cervantes .....	July 8, 1869					4 5 69	16 39 62	34 43 87
Thornton F. Battelle .....	July 19, 1869						29 0 00	172 1 67
Gilbert W. Colby .....	Jan. 21, 1870			2 53 65		20 17 21	24 71 72	71 52 96
J. T. Pennington .....	Jan. 21, 1870					19 35 55	1 51 00	44 58 00
Elias J. Edwards .....	Aug. 2, 1870						1 76 13	63 57 06
William H. Norway .....	Oct. 25, 1870			20 49 06				
John Goldsworthy .....	Jan. 9, 1871						2 43 65	39 52 24
E. W. Brown .....	Jan. 10, 1871							24 63 22
William H. Norway .....	Jan. 16, 1871					29 35 74		24 73 45
A. B. Beauvais .....	Jan. 25, 1871						6 4 50	59 61 84
J. W. Mackall .....	Jan. 28, 1871						6 45 85	14 73 97
Edward C. Uren .....	Feb. 6, 1871					2 27 38		
Edward C. Uren .....	Feb. 16, 1871					1 27 54		
T. J. Dewoody .....	Feb. 18, 1871							19 77 56
J. W. McKamy .....	Feb. 23, 1871					6 66 85		5 79 73
Gustavus Cox .....	Mar. 21, 1871					2 57 78	2 14 63	8 73 07
J. M. Ingalls .....	April 5, 1871			7 23 00			48 45 63	183 14 32
George Small .....	April 5, 1871						54 77 15	184 2 09
Joseph J. Cloud .....	April 6, 1871					2 9 62	63 50	2 64 47
J. H. Pieper .....	June 7, 1871		1 40 00				5 40 00	5 34 19
Isaac N. Chapman .....	June 14, 1871						3 0 00	49 44 31
Wilfred F. Ingalls .....	June 15, 1871			36 0 00			203 62 97	419 54 77
Wilfred F. Ingalls .....	June 15, 1871							540 3 02
John M. Ingalls .....	June 15, 1871			8 40 00			121 42 74	528 18 73
John M. Ingalls .....	June 15, 1871			26 0 00			92 32 80	433 36 24
John Reed .....	June 20, 1871						4 0 56	13 2 12
Denton D. Brown .....	June 20, 1871			5 78 50				43 72 06
Denton D. Brown .....	June 30, 1871						2 0 00	4 1 50
Alexander McKay .....	July 15, 1871			61 1 50		21 5 88	147 66 20	698 26 19
George Small .....	July 15, 1871			24 00 00		17 4 64	105 38 47	351 51 48
George Small .....	July 15, 1871							60 3 56
Isaac N. Chapman .....	July 21, 1871			1 39 34			3 34 40	12 38 71
Henry F. Terry .....	July 22 and } Nov. 13, 1871 }						2 0 00	28 2 90
William Minto .....	Aug. 9, 1871			10 30 71		21 42 96	98 48 55	238 72 24
Elias J. Edwards .....	Aug. 11, 1871							5 1 54
Henry F. Terry .....	Aug. 22, 1871						5 0 00	8 1 30
Denton D. Brown .....	Sept. 19, 1871							1 0 40
Denton D. Brown .....	Sept. 19, 1871			2 0 00			7 0 00	7 40 35
William Magee .....	Sept. 20, 1871							21 43 00
H. S. Smith .....	Sept. 26, 1871						1 40 00	13 0 00



Robert R. Harris .....	Sept. 30, 1871	.....	.....	.....	.....	.....	3 0 00	1 60 00
Walter I. Rumble .....	Oct. 19, 1871	.....	.....	6 0 13	.....	2 14 28	18 10	13 60 79
Isaac N. Chapman .....	Nov. 11, 1871	.....	.....	.....	.....	.....	4 40 00	23 66 92
William J. Lewis .....	Nov. 14, 1871	.....	.....	.....	.....	.....	.....	31 21 38
Robert R. Harris .....	Dec. 5, 1871	.....	.....	.....	.....	.....	.....	37 43 12
John Reed .....	Dec. 9, 1871	.....	.....	.....	.....	.....	39 55	49 71
Isaac N. Chapman .....	Dec. 11, 1871	.....	.....	.....	.....	.....	40 32	13 62 30
Robert R. Harris .....	Feb. 5, 1872	.....	.....	.....	.....	.....	.....	4 18 25
William Magee .....	Feb. 12, 1872	.....	.....	.....	.....	.....	1 0 00	6 2 50
E. H. Marshall .....	Mar. 28, 1872	.....	.....	.....	.....	.....	.....	1 39 70
Total miles surveyed to June 30, 1872.....	.....	358 04 50	754 58 45	4,776 01 21	2,755 59 34	1,196 14 91	25,521 68 36	100,441 21 11

J. R. HARDENBERGH,  
*United States Surveyor General for California.*







34	aTownship 13 north, range 1 east	do	4,257.90	A				11,528.00	A + river	7,340.55	23,126.45
35	aTownship 13 north, range 2 east	do	5,533.92	A				17,317.60	A + river	112.40	22,963.92
36	aTownship 14 north, range 1 east	do	5,166.00	A				9,446.66	A + river	8,436.53	23,049.19
37	aTownship 17 north, range 3 east	do	8,120.14	A					A + river	14,862.26	22,982.40
38	aTownship 18 north, range 3 east	do	12,201.13	A					A + river	10,812.47	23,013.60
39	aTownship 21 north, range 14 east	do	22,567.42					480.00			23,047.42
40	Township 28 north, range 6 east	do	13,757.32				9,280.00				23,037.32
41	Township 29 north, range 3 east	do	7,594.06				14,380.00	1,040.00			23,014.06
42	Township 29 north, range 4 east	do	10,797.56				9,590.00	2,637.70			23,025.26
43	Township 29 north, range 6 east	do	22,312.61					680.76	Willow Lake	29.63	23,023.00
44	Township 30 north, range 6 east	do	1,770.94				20,760.00	440.00			22,970.94
45	Township 31 north, range 7 east	do	17,613.44				5,440.00				23,053.44
46	Township 31 north, range 8 east	do	22,827.26					200.00			23,027.26
47	Township 31 north, range 9 east	do	22,947.78					123.16			23,070.94
48	Township 32 north, range 7 east	do	23,010.49								23,010.49
49	Township 32 north, range 8 east	do	23,039.24								23,039.24
50	Township 32 north, range 9 east	do	23,065.53								23,065.53
51	Township 33 north, range 6 east	do	22,972.45								22,972.45
52	Township 33 north, range 7 east	do	22,910.15								22,910.15
53	Township 33 north, range 8 east	do	23,123.38								23,123.38
54	Township 33 north, range 9 east	do	23,102.13								23,102.13
55	Township 33 north, range 10 east	do	22,886.65						Eagle Lake	148.85	23,035.50
56	Township 33 north, range 11 east	do	14,699.88						Eagle Lake	8,336.00	23,035.88
57	Township 34 north, range 6 east	do	22,974.33								22,974.33
58	Township 34 north, range 7 east	do	22,951.98								22,951.98
59	Township 34 north, range 8 east	do	23,049.36								23,049.36
60	Township 34 north, range 9 east	do	23,148.97								23,148.97
61	Township 34 north, range 11 east	do	21,525.77					1,522.89			23,048.66
62	Township 34 north, range 13 east	do	23,051.23								23,051.23
63	Township 34 north, range 14 east	do	23,009.98								23,009.98
64	Township 35 north, range 6 east	do	15,709.83								15,709.83
65	Township 35 north, range 7 east	do	15,157.30					520.00			15,677.30
66	Township 35 north, range 9 east	do	15,710.40								15,710.40
67	Township 35 north, range 11 east	do	15,700.46								15,700.46
68	Township 35 north, range 12 east	do	15,715.04								15,715.04
69	Township 35 north, range 13 east	do	15,762.54								15,762.54
70	Township 38 north, range 14 east	do	9,990.65					1,521.32			11,511.97
71	Township 39 north, range 13 east	do	22,958.72					78.33			23,037.05
72	Township 40 north, range 12 east	do	6,031.29					5,888.45			11,919.74
73	Township 41 north, range 8 east	do	23,000.08								23,000.08
74	Township 41 north, range 9 east	do	22,693.20					359.19			23,052.39
75	Township 41 north, range 10 east	do	23,017.97								23,017.97
76	Township 41 north, range 11 east	do	22,332.72					680.00			23,012.72
77	Township 41 north, range 12 east	do	20,555.06					2,440.25			22,995.31
78	Township 41 north, range 13 east	do	23,076.34								23,076.34
79	Township 42 north, range 8 east	do	22,940.46								22,940.46
80	Township 42 north, range 9 east	do	22,922.89					78.43			23,001.32
81	Township 42 north, range 10 east	do	23,034.56								23,034.56
82	Township 42 north, range 11 east	do	22,839.89					80.00			22,919.89
83	Township 42 north, range 12 east	do	21,849.24					1,120.00			22,969.24
84	Township 42 north, range 13 east	do	22,234.73					889.72			23,124.45

a Townships returned in previous reports, the areas of which are changed by subsequent surveys or amendments.



E.—List of lands surveyed in California from June 30, 1871, to June 30, 1872—Continued.

No. of township surveyed.	Description.	Meridian.	Public land.	A.	B.	C.	D.	E.	F.	Remarks.	Total.
				Confirmed private land claims.	Military reservation.	Indian reservation.	Unsurveyed mountain land.	River, swamp, and overflowed land.	Unsurveyed public land.		
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
85	Township 43 north, range 8 east	Mount Diablo	22,994.99								22,994.99
86	Township 43 north, range 9 east	do	22,960.67								22,960.67
87	Township 43 north, range 10 east	do	21,314.92					1,717.44			23,032.36
88	Township 43 north, range 11 east	do	22,937.33								22,937.33
89	Township 43 north, range 12 east	do	22,930.74								22,930.74
90	Township 43 north, range 13 east	do	23,170.72								23,170.72
91	Township 44 north, range 11 east	do	22,513.84					399.91			22,913.75
92	Township 44 north, range 12 east	do	22,877.46								22,877.46
93	Township 44 north, range 13 east	do	22,986.92					240.00			23,226.92
94	Township 44 north, range 14 east	do	16,634.65				6,398.72				23,033.37
95	Township 45 north, range 11 east	do	23,573.17								23,573.17
96	Township 45 north, range 12 east	do	23,573.10								23,573.10
97	Township 45 north, range 13 east	do	11,613.26					837.52		Goose Lake 11,470.00	23,920.78
98	Township 45 north, range 14 east	do	15,174.19				7,680.00			Goose Lake 180.05	23,034.24
99	Township 46 north, range 11 east	do	23,059.38								23,059.38
100	Township 46 north, range 12 east	do	23,052.51								23,052.51
101	Township 46 north, range 14 east	do	14,861.42							Goose Lake 8,173.40	23,034.82
102	Township 46 north, range 16 east	do	17,744.02		1,612.66					Upper Lake 3,693.10	23,049.78
103	Township 47 north, range 11 east	do	23,081.29								23,081.29
104	Township 47 north, range 12 east	do	23,106.12								23,106.12
105	Township 47 north, range 13 east	do	4,223.68							Goose Lake 19,580.00	23,803.68
106	Township 2 north, range 6 west	do	165.19	A				E.		A + E 22,874.81	23,040.00
107	Township 4 north, range 6 west	do	21.24	A				E.		A + E 23,106.12	23,127.36
108	Township 4 north, range 7 west	do	10,812.43	A				E.		A + E 12,252.75	23,065.18
109	Township 6 north, range 6 west	do	2,523.73	A					F.	A + F 20,615.39	23,139.12
110	Township 7 north, range 2 west	do	14,391.95	975.73			7,674.56				23,042.24
111	Township 7 north, range 4 west	do	9,961.35	1,757.15			11,727.40				23,445.90
112	Township 8 north, range 2 west	do	18,146.95	229.99			4,820.00				23,196.94
113	Township 8 north, range 6 west	do	13,287.68	A			D.			A + D 9,091.96	22,379.64
114	Township 8 north, range 13 west	do	3,600.48	3,159.52							6,760.00
115	Township 9 north, range 2 west	do	16,637.34				6,401.40				23,038.74
116	Township 9 north, range 4 west	do	12,509.93	10,470.00							22,979.93
117	Township 9 north, range 5 west	do	12,156.12	8,989.89							21,146.01



118	Township 10 north, range 5 west..	do	17,269.89				6,817.48		24,087.37
119	Township 11 north, range 6 west..	do	8,008.57	A		D		A + D 13,860.00	21,868.57
120	aTownship 12 north, range 1 west..	do	18,861.89				3,879.55		22,741.44
121	aTownship 13 north, range 1 west..	do	15,488.20				7,128.15		22,616.35
122	aTownship 13 north, range 8 west..	do	3,050.11			D		D + lake 20,050.00	23,100.11
123	aTownship 14 north, range 2 west..	do	22,587.82				80.07		22,667.89
124	aTownship 14 north, range 4 west..	do	11,209.52			11,960.00			23,169.52
125	aTownship 14 north, range 7 west..	do	13,697.16			8,640.00		Clear Lake 602.53	22,939.69
126	aTownship 15 north, range 2 west..	do	19,282.93				3,219.79		22,502.72
127	aTownship 15 north, range 4 west..	do	14,178.90				8,984.00		23,162.90
128	aTownship 15 north, range 5 west..	do	17,024.12			5,056.00	2,200.00		24,280.12
129	Township 16 north, range 2 west..	do	17,140.80	5,826.45					22,967.25
130	aTownship 16 north, range 4 west..	do	22,837.54						22,837.54
131	Township 16 north, range 5 west..	do	15,419.38			7,405.28			22,824.66
132	Township 16 north, range 6 west..	do	2,291.98			20,800.00			23,091.98
133	aTownship 17 north, range 4 west..	do	23,032.20						23,032.20
134	aTownship 18 north, range 4 west..	do	23,041.57						23,041.57
135	Township 20 north, range 2 west..	do	7,571.68	15,270.00					22,841.68
136	Township 21 north, range 2 west..	do	12,423.52	10,470.00					22,893.52
137	Township 22 north, range 2 west..	do	7,901.56	A				A + river 15,060.00	22,961.56
138	Township 26 north, range 3 west..	do	795.15	A				{ A + river } { A + island. } 22,196.85	22,992.00
139	aTownship 26 north, range 4 west..	do	18,092.98	4,912.17					23,005.15
140	aTownship 31 north, range 1 west..	do	12,155.12			10,865.80			23,020.92
141	Township 33 north, range 6 west..	do	2,080.00			21,040.00			23,120.00
142	Township 33 north, range 7 west..	do	160.00			22,880.00			23,040.00
143	Township 33 north, range 8 west..	do	4,340.00			18,699.22			23,040.00
144	Township 33 north, range 9 west..	do	3,840.00			19,200.00			23,040.00
145	Township 1 south, range 4 east..	do	1,569.59	4,754.00			16,735.30		23,058.89
146	Township 1 south, range 5 east..	do	7,310.00				16,210.00		23,520.00
147	aTownship 3 south, range 2 east..	do	7,891.32	15,201.00					23,092.32
148	aTownship 4 south, range 2 east..	do	15,690.33	7,348.36					23,038.69
149	Township 6 south, range 1 east..	do	566.42	A			E.	A + E 22,431.58	22,998.00
150	aTownship 12 south, range 18 east..	do	22,921.19					San Joaquin Riv. 124.28	23,045.47
151	Township 13 south, range 5 east..	do	1,068.89	22,038.31					23,107.20
152	Township 14 south, range 10 east..	do	23,950.43						23,950.43
153	Township 14 south, range 11 east..	do	25,140.74						25,140.74
154	aTownship 14 south, range 25 east..	do	3,361.60			19,678.40			23,040.00
155	Township 15 south, range 9 east..	do	22,912.62						22,912.62
156	Township 15 south, range 10 east..	do	23,079.46						23,079.46
157	Township 15 south, range 11 east..	do	24,310.07						24,310.07
158	Township 16 south, range 11 east..	do	24,186.60						24,186.60
159	Township 17 south, range 11 east..	do	8,480.00			16,270.00			24,750.00
160	aTownship 17 south, range 12 east..	do	4,984.00			18,100.00			23,084.00
161	aTownship 27 south, range 10 east..	do	12,568.79	A		D.		A + D 9,442.08	22,010.87
162	aTownship 28 south, range 19 east..	do	22,495.17						22,495.17
163	aTownship 28 south, range 20 east..	do	23,147.65						23,147.65
164	aTownship 30 south, range 13 east..	do	7,206.77	A		D.		A + D 15,877.17	23,083.94
165	aTownship 30 south, range 20 east..	do	23,033.38						23,033.38
166	aTownship 30 south, range 22 east..	do	23,047.70						23,047.70

a Townships returned in previous reports, the areas of which are changed by subsequent surveys or amendments.



E.—List of lands surveyed in California from June 30, 1871, to June 30, 1872—Continued.

No. of township surveyed.	Description.	Meridian.	Public land.	A. Confirmed private land claims.	B. Military reservation.	C. Indian reservation.	D. Unsurveyed moun- tain land.	E. River, swamp, and overflowed land.	F. Unsurveyed public land.	Remarks.	Total.
			<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
167	αTownship 31 south, range 12 east ..	Mount Diablo...	4,918.38	A			D.			A + D	22,985.17
168	Township 31 south, range 16 east ..	do .....	400.00				22,640.00				23,040.00
169	Township 32 south, range 12 east ..	do .....	57.86	4,870.00							4,927.86
170	Township 32 south, range 16 east ..	do .....	12,506.04				10,533.96				23,040.00
171	Township 2 south, range 1 west ..	San Bernardino.	12,019.02	A			D.			A + D	23,189.02
172	Township 2 south, range 2 west ..	do .....	7,793.01	A			D.			A + D	23,230.61
173	αTownship 2 south, range 14 west ..	do .....	9,951.11	13,054.33							23,005.44
174	Township 12 south, range 1 west ..	do .....	5,195.45	A			D.			A + D	23,045.45
175	Township 3 north, range 24 west ..	do .....	8,685.14	4,685.40							13,370.54
176	Township 3 north, range 25 west ..	do .....	442.63	150.00							592.63
177	αTownship 1 north, range 2 west ..	Humboldt .....	22,047.30				960.00				23,007.30
178	αTownship 1 north, range 3 west ..	do .....	9,272.64								9,272.64
Aggregate.....			2,462,368.41	181,013.14	1,612.66		371,540.74	551,353.37	15,801.48	375,262.54	3,958,952.34
a	Township 2 north, range 1 east ..	Mount Diablo...	8,128.91	A				E.		A + E	22,878.91
a	Township 2 north, range 3 east ..	do .....	3,109.54					19,930.46			23,040.00
a	Township 3 north, range 1 east ..	do .....	11,006.84					11,764.00			22,770.84
a	Township 5 north, range 4 east ..	do .....	3,156.56					17,596.33			20,752.89
a	Township 6 north, range 2 east ..	do .....	22,463.52					560.00			23,023.52
a	Township 6 north, range 3 east ..	do .....	7,076.85					16,046.90			23,123.75
a	Township 6 north, range 4 east ..	do .....	6,088.70					14,756.88			20,845.58
a	Township 6 north, range 8 east ..	do .....	19,818.11				3,200.00				23,018.11
a	Township 7 north, range 3 east ..	do .....	12,037.88					10,788.50			22,826.38
a	Township 7 north, range 4 east ..	do .....	6,971.43					13,783.77			20,755.20
a	Township 8 north, range 2 east ..	do .....	18,930.07	3,828.14							22,758.21
a	Township 8 north, range 3 east ..	do .....	6,739.90					16,320.00			23,059.90
a	Township 9 north, range 2 east ..	do .....	22,938.25								22,938.25
a	Township 10 north, range 2 east ..	do .....	10,485.62	12,487.18							22,972.80
a	Township 11 north, range 1 east ..	do .....	21,392.67					1,680.00			23,072.67
a	Township 11 north, range 2 east ..	do .....	14,326.48	A				E.		A + E	23,068.40



a	Township 12 north, range 1 east	do	6,356.01	A			E	A + E	16,793.19	23,149.20
a	Township 12 north, range 2 east	do	8,661.12	A			E	A + E	14,328.00	22,989.12
a	Township 13 north, range 1 east	do	14,964.80	A			E	A + E	8,162.80	23,127.60
a	Township 13 north, range 2 east	do	12,678.32	A			E	A + E	10,285.60	22,963.92
a	Township 14 north, range 1 east	do	11,132.66	A			E	A + E	11,916.53	23,049.19
a	Township 17 north, range 3 east	do	4,190.38	A				A + riv. land	18,792.02	22,982.40
a	Township 18 north, range 3 east	do	1,576.08	A				A + riv. land	21,437.52	23,013.60
a	Township 21 north, range 14 east	do	18,092.52			D	E	D + E	4,960.00	23,052.52
a	Township 46 north, range 16 east	do	17,773.52	1,583.16			3,693.10			23,049.78
a	Township 7 north, range 2 west	do	9,671.95	975.73		12,394.56				23,042.24
a	Township 8 north, range 6 west	do	10,575.44	A		D		A + D	11,804.20	22,379.64
a	Township 8 north, range 2 west	do	17,666.95	229.99		5,300.00				23,196.94
a	Township 9 north, range 2 west	do	16,477.34			6,561.40				23,038.74
a	Township 12 north, range 1 west	do	22,741.44							22,741.44
a	Township 13 north, range 1 west	do	16,965.12				5,653.93			22,619.05
a	Township 13 north, range 8 west	do	990.32			D	E	D + E	22,049.68	23,040.00
a	Township 14 north, range 2 west	do	22,667.89							22,667.89
a	Township 14 north, range 4 west	do	10,040.32			13,054.40				23,094.72
a	Township 14 north, range 7 west	do	9,697.16			12,640.92	602.53			22,940.61
a	Township 15 north, range 2 west	do	22,502.72							22,502.72
a	Township 15 north, range 4 west	do	13,058.90					10,104.00		23,162.90
a	Township 15 north, range 5 west	do	16,330.91			5,760.00	2,200.00			24,290.91
a	Township 16 north, range 4 west	do	15,330.16			7,680.00				23,010.16
a	Township 17 north, range 4 west	do	19,847.68			3,200.00				23,047.68
a	Township 18 north, range 4 west	do	21,121.57			1,920.00				23,041.57
a	Township 3 south, range 2 east	do	7,970.72	15,121.60						23,092.32
a	Township 4 south, range 2 east	do	15,578.69	7,460.00						23,038.69
a	Township 12 south, range 18 east	do	21,125.47					F	F + river	1,920.00
a	Township 14 south, range 25 east	do	640.00			22,400.00				23,040.00
a	Township 17 south, range 12 east	do	2,424.00			20,603.04				22,027.04
a	Township 27 south, range 10 east	do	12,528.79	A		D		A + D	9,482.08	22,010.87
a	Township 28 south, range 19 east	do	7,840.52			15,117.52				22,958.04
a	Township 28 south, range 20 east	do	20,303.36			2,880.00				23,183.36
a	Township 30 south, range 13 east	do	6,032.53	A		D		A + D	17,051.41	23,083.94
a	Township 30 south, range 20 east	do	7,511.34			15,481.14				22,992.48
a	Township 30 south, range 22 east	do	16,959.58			6,080.00				23,039.58
a	Township 31 south, range 12 east	do	4,795.17	A		D		A + D	18,190.00	22,985.17
a	Township 2 south, range 1 west	San Bernardino	5,120.00			17,920.00				23,040.00
a	Township 2 south, range 14 west	do	9,932.80	13,072.64						23,005.44
a	Township 1 north, range 2 west	Humboldt	18,206.80			4,798.40				23,005.20
a	Township 1 north, range 3 west	do	6,179.87			3,112.00				9,291.87
aReturned in previous reports			698,932.25	54,758.44		180,103.38	135,376.40	10,104.00	210,664.95	1,289,939.42
Aggregate brought down			2,462,368.41	181,013.14	1,612.66	371,540.74	551,353.37	15,801.48	375,262.54	3,958,952.34
aReturned in previous reports			698,932.25	54,758.44		180,103.38	135,376.40	10,104.00	210,664.95	1,289,939.42
Aggregate			1,763,436.16	126,254.70	1,612.66	191,437.36	415,976.97	5,697.48	164,597.59	2,669,012.92

a Townships returned in previous reports, the areas of which are changed by subsequent surveys or amendments.



RECAPITULATION.

Acres public land surveyed.....	1, 763, 436. 16
Acres, as per column "A".....	126, 254. 70
Acres, as per column "B".....	1, 612. 66
Acres, as per column "D".....	191, 437. 36
Acres, as per column "E".....	415, 976. 97
Acres, as per column "F".....	5, 697. 48
Acres, as per column "Remarks".....	164, 597. 59
Aggregate acres.....	2, 669, 012. 92

J. H. WILDES,  
Chief Draughtsman.

F.—Statement of plats made in the office of the surveyor general for California during the fiscal year 1871-'72.

Description.	Originals.	Department.	Register.	Court.	Skeleton maps.	Total.
Plats of township lines.....	12	12	.....	.....	.....	24
Maps of subdivision line and amendments.....	174	168	137	.....	.....	479
Plats of ranches.....	12	25	.....	1	78	116
Plats of mining claims.....	104	105	104	.....	.....	313
Maps of two bodies of land, notoriously "swampy and overflowed," (14 townshps.).....	1	1	3	.....	.....	5
Aggregate.....	303	311	244	1	78	937

J. H. WILDES,  
Chief Draughtsman.

G.—Statement of transcripts of field notes of public surveys sent to the Department at Washington from the office of the United States surveyor general for California during the fiscal year 1871-'72.

Name of deputy.	Date of contract.	No. of transcripts.	When sent.
James G. Mather.....	Oct. 24, 1870	5	July 1, 1871
John M. Ingalls.....	Sept. 23, 1870	2	July 3, 1871
Isaac N. Chapman.....	May 12, 1871	1	July 6, 1871
George W. Schell.....	Oct. 1, 1870	1	July 20, 1871
Hubert C. Ward.....	Sept. 2, 1869	7	July 24, 1871
Joseph J. Cloud.....	Sept. 16, 1870	11	Aug. 18, 1871
Denton D. Brown.....	Dec. 12, 1870	4	Aug. 23, 1871
Henry F. Terry.....	Jan. 12, 1871	1	Sept. 1, 1871
John Reed.....	June 20, 1871	1	Sept. 9, 1871
John Goldsworthy.....	Jan. 9, 1871	1	Sept. 22, 1871
A. B. Beauvais.....	Jan. 25, 1871	2	Sept. 22, 1871
Isaac N. Chapman.....	June 14, 1871	1	Sept. 22, 1871
George Small.....	Apr. 3, 1871	3	Sept. 30, 1871
John M. Ingalls.....	Apr. 5, 1871	5	Sept. 30, 1871
Denton D. Brown.....	* June 24, 1871	1	Nov. 8, 1871
Do.....	Sept. 19, 1871	2	Nov. 11, 1871
Elijah W. Brown.....	Jan. 10, 1871	1	Nov. 13, 1871
Wilfred F. Ingalls.....	June 15, 1871	19	Nov. 14, 1871
J. T. Pennington.....	Jan. 21, 1870	2	Nov. 15, 1871
William Magee.....	Sept. 20, 1871	1	Nov. 15, 1871
A. Leon Cervantes.....	July 8, 1869	4	Nov. 16, 1871
Denton D. Brown.....	June 20, 1871	1	Nov. 25, 1871
Do.....	June 30, 1871	1	Nov. 25, 1871
Elias J. Edwards.....	Aug. 2, 1870	3	Nov. 27, 1871
John Prentice.....	June 11, 1870	3	Nov. 27, 1871

\* Special instructions.



## G.—Statement of transcripts of field notes of public surveys, &amp;c.—Continued.

Name of deputy.	Date of contract.	No. of transcripts.	When sent.
J. S. Murray.....	*Oct. 3, 1870	3	Nov. 28, 1871
John M. Ingalls.....	June 15, 1871	17	Nov. 28, 1871
J. W. Mackall.....	Jan. 28, 1871	1	Nov. 29, 1871
Robert R. Harris.....	*Oct. 20, 1870	1	Nov. 29, 1871
William J. Lewis.....	Nov. 14, 1871	2	Dec. 12, 1871
T. J. Dewoody.....	(†)	1	Dec. 13, 1871
Gustavus Cox.....	Mar. 21, 1871	1	Dec. 15, 1871
Henry F. Terry.....	Aug. 22, 1871	1	Dec. 16, 1871
Hiram Austin.....	June 24, 1869	2	Jan. 6, 1872
George Small.....	July 15, 1871	16	Jan. 20, 1872
T. F. Battelle.....	July 19, 1869	9	Jan. 30, 1872
Isaac N. Chapman.....	July 21, 1871	1	Jan. 31, 1872
Edward C. Uren.....	Feb. 6, 1871	1	Feb. 1, 1872
Do.....	Feb. 16, 1871	1	Feb. 1, 1872
T. J. Dewoody.....	Feb. 18, 1871	1	Feb. 1, 1872
Do.....	*Mar. 28, 1871	1	Feb. 1, 1872
J. H. Pieper.....	June 7, 1871	1	Feb. 2, 1872
J. W. McKamy.....	Feb. 23, 1871	1	Feb. 5, 1872
Henry F. Terry.....	July 22 and Nov. 13, 1871	2	Feb. 7, 1872
Alexander McKay.....	July 15, 1871	26	Feb. 9, 1872
William H. Norway.....	Jan. 16, 1871	3	Feb. 12, 1872
Wilfred F. Ingalls.....	June 15, 1871	9	Feb. 24, 1872
Joseph J. Cloud.....	Apr. 6, 1871	1	Feb. 26, 1872
Denton D. Brown.....	*Sept. 19, 1871	1	Mar. 2, 1872
Do.....	*July 8, 1871	1	Mar. 2, 1872
William H. Norway.....	Oct. 25, 1870	1	Mar. 2, 1872
Gilbert W. Colby.....	Jan. 21, 1870	3	Mar. 4, 1872
William Magee.....	Nov. 30, 1870	2	Mar. 5, 1872
H. S. Smith.....	Sept. 26, 1871	1	Mar. 8, 1872
George Small.....	July 15, 1871	1	Mar. 11, 1872
Robert R. Harris.....	Dec. 5, 1871	1	Mar. 29, 1872
Do.....	Sept. 30, 1871	1	Mar. 29, 1872
Do.....	Feb. 5, 1872	1	Mar. 29, 1872
John M. Ingalls.....	June 15, 1871	17	Apr. 20, 1872
Isaac N. Chapman.....	Dec. 11, 1871	1	May 20, 1872
E. H. Marshall.....	Mar. 28, 1872	1	May 22, 1872
William Minto.....	Aug. 9, 1871	12	May 22, 1872
William Magee.....	*Jan. 26, 1872	1	May 24, 1872
Do.....	Feb. 12, 1872	2	May 24, 1872
Walter I. Rumble.....	Oct. 19, 1871	1	June 14, 1872
Elias J. Edwards.....	Aug. 11, 1871	1	June 15, 1872
John Reed.....	Dec. 9, 1871	1	June 17, 1872
Leander Ransom.....	*Nov. 10, 1871	1	June 17, 1872
T. J. Dewoody.....	*Nov. 28, 1871	1	June 18, 1872
H. H. Sandford.....	*July 8, 1871	1	June 21, 1872
Isaac N. Chapman.....	Nov. 11, 1871	1	June 22, 1872
Max Strobel.....	June 22, 1868	1	June 28, 1872
Total.....		240	

\* Special instructions.

† Verbal instructions.

J. R. HARDENBERGH,  
United States Surveyor General for California.



H.—Statement of descriptive notes, decrees of court, &c., of private land claims to accompany plats for patents, compiled for transmission to the Department at Washington, during the fiscal year 1871-'72.

When sent.	Papers transmitted.	Name of claim.	To whom confirmed.
July 18, 1871	Opinion and map of Mahoney's selection.....	Laguna de la Merced .....	Josefa de Haro <i>et al.</i>
Aug. 12, 1871	Plat and descriptive notes.....	Cañada de los Capitancillos.....	Guadalupe Mining Company.
Aug. 12, 1871	Plat, decrees, certificates, descriptive notes, and opinion .....	Topanda Malibu Sequit.....	Matthew Keller.
Aug. 12, 1871	.....do .....	Agua Caliente.....	M. G. Vallejo.
Aug. 12, 1871	.....do .....	Agua Caliente.....	C. P. Stone.
Sept. 8, 1871	Plat and descriptive notes.....	Laguna de la Merced .....	Josefa de Haro <i>et al.</i>
Sept. 26, 1871	Plat, decrees, certificates, descriptive notes, and opinion.....	San Lucas .....	James McKinley.
Oct. 3, 1871	.....do .....	Two Suertes.....	D. S. Gregory and E. L. Williams.
Dec. 5, 1871	Plat and descriptive notes.....	Sespe .....	Thomas W. Moore.
Jan. 8, 1872	Plat, decrees, certificates, descriptive notes, and opinion.....	Providencia.....	D. W. Alexander <i>et al.</i>
Jan. 8, 1872	.....do .....	Cahuenga .....	D. W. Alexander.
Jan. 17, 1872	.....do .....	Rincon de los Bueyes .....	Francisco Higuera <i>et al.</i>
Jan. 17, 1872	.....do .....	Los Medanos.....	Jonathan D. Stevenson <i>et al.</i>
Jan. 17, 1872	.....do .....	Lac .....	Jacob P. Leese.
Jan. 18, 1872	.....do .....	San Jacinto y San Gorgonio.....	Louis Roubideaux.
Jan. 24, 1872	.....do .....	La Brea .....	Antonio José Rocha <i>et al.</i>
Jan. 26, 1872	Plat, skeleton plats, and descriptive notes.....	San Joaquin .....	Cruz Cervantes.
Mar. 13, 1872	Plat, decrees, certificates, descriptive notes, and opinion.....	Jurupa .....	Abel Stearns.
April 8, 1872	Plat, descriptive notes, and decrees.....	Petaluma .....	M. G. Vallejo.
April 30, 1872	.....do .....	Mallacomes .....	José Berreyessa.
May 7, 1872	Plat, decrees, certificates, descriptive notes, and opinion .....	Los Alimos .....	J. A. de la Guerra y Carrillo.
May 21, 1872	Plat, descriptive notes, and decrees.....	Alisal .....	M. T. de la Guerra Hartnell <i>et al.</i>

J. R. HARDENBERGH,  
United States Surveyor General for California.



I.—Statement of special deposits for the survey of public lands in California during the fiscal year 1871-'72.

Name of depositor.	Date of deposit.	Amount of deposit.	Amount of account.	Name of deputy.	Location of survey.	Meridian.	Remarks.
Hiram Manasse .....	July 10, 1871	\$160 00	\$263 01	Walter I. Rumble .....	Township 12 south, range 1 west.....	San Bernardino.	Additional deposit.
Moses Manasse .....	Jan. 6, 1872	200 00		do .....	do .....	do .....	
Green Bartlet .....	July 11, 1871	96 00	187 00	Isaac N. Chapman .....	Township 15 north, range 8 west.....	Mount Diablo...	
Do .....	Aug. 3, 1871	91 00		do .....	do .....	do .....	Do.
Central Pacific R. R. Co. .	July 12, 1871	400 00					For lands listed to company.
John Perry .....	July 18, 1871	168 00	168 00	Henry F. Terry .....	Township 5 north, range 15 east.....	Mount Diablo...	
Western Pacific R. R. Co .	July 25, 1871	50 00		Joseph J. Cloud .....	Township 3 south, range 2 west.....	do .....	
Frank Staples .....	July 29, 1871	50 00	50 00	E. J. Edwards .....	Township 18 north, range 4 west.....	do .....	Do.
Central Pacific R. R. Co. .	Aug. 14, 1871	410 00					
Sperry & Perry .....	Aug. 18, 1871	171 00	171 00	Henry F. Terry .....	Township 5 north, range 16 east.....	Mount Diablo...	
C. D. Wycoff .....	Sept. 9, 1871	79 50	184 00	D. D. Brown .....	Township 21 north, range 14 east.....	do .....	Additional deposit.
Peter Schutts .....	do .....	79 50		do .....	do .....	do .....	
Do .....	Oct. 10, 1871	25 00		do .....	do .....	do .....	
Isaac Ramba .....	Sept. 12, 1871	128 00	215 38	William Magee .....	Township 26 north, range 4 west.....	do .....	Do.
Jacob Ramba .....	do .....	128 00		do .....	do .....	do .....	
Henry Seaman .....	Sept. 18, 1871	10 00	10 00	D. D. Brown .....	Township 8 north, range 2 west.....	do .....	
W. F. Rowe .....	Sept. 25, 1871	125 00	178 50	H. S. Smith .....	Township 14 north, range 7 west.....	do .....	Do.
E. A. Rowe .....	do .....	125 00		do .....	do .....	do .....	
Albert Towers .....	Sept. 30, 1871	146 00	53 50	R. R. Harris .....	Township 31 south, range 16 east.....	do .....	
José Dorome .....	do .....	146 00		do .....	do .....	do .....	Do.
Loreto Vasquez .....	do .....	146 00		do .....	do .....	do .....	
S. L. Hogan .....	Oct. 5, 1871	150 00		Jarvis Kiel .....	Township 5 south, range 21 east.....	do .....	
Edwin Moore .....	do .....	150 00		do .....	do .....	do .....	Do.
Galen Clarke .....	do .....	150 00		do .....	do .....	do .....	
Galen A. Clarke .....	do .....	150 00		do .....	do .....	do .....	
J. P. Thompson .....	Oct. 12, 1871	95 00		do .....	Township 5 south, range 20 east .....	do .....	Do.
S. E. Magoon .....	do .....	136 33		do .....	do .....	do .....	
J. J. Westfall .....	do .....	122 95		do .....	do .....	do .....	
James M. Harris .....	do .....	95 00		do .....	do .....	do .....	Do.
C. M. Westfall .....	do .....	122 95		do .....	do .....	do .....	
Charles C. Laird .....	do .....	27 77		do .....	do .....	do .....	
Pleasant Smith .....	Oct. 20, 1871	175 00	350 00	Isaac N. Chapman .....	Township 11 north, range 6 west.....	do .....	Do.
W. R. Matthews, guard'n.	Dec. 5, 1871	175 00		do .....	do .....	do .....	
George Davis .....	Oct. 26, 1871	80 00		do .....	Township 8 north, range 3 west.....	do .....	
Freeman Dunbar .....	Nov. 8, 1871	75 00	150 00	Henry F. Terry .....	Township 5 north, range 15 east.....	do .....	Do.
Willis Dunbar .....	do .....	75 00		do .....	do .....	do .....	
George Ashurt .....	Nov. 14, 1871	163 50	375 21	William J. Lewis .....	Township 17 south, range 12 east.....	do .....	
William Williams .....	do .....	163 50		do .....	do .....	do .....	Do.
J. Crowningshield .....	do .....	163 50		do .....	do .....	do .....	
José M. Larios .....	do .....	163 50		do .....	do .....	do .....	
J. Ashurt .....	do .....	177 00		do .....	Township 17 south, range 11 east.....	do .....	



## I.—Statement of special deposits for the survey of public lands in California, &amp;c.—Continued.

Name of depositor.	Date of deposit.	Amount of deposit.	Amount of account.	Name of deputy.	Location of survey.	Meridian.	Remarks.
Ramon F. Canaya .....	Nov. 14, 1871	\$177 00		William J. Lewis .....	Township 17 south, range 11 east .....	Mount Diablo .....	
José M. Lopez .....	Nov. 27, 1871	211 00	\$375 39	Robert R. Harris .....	Township 32 south, range 16 east .....	do .....	
Levi Racliffe .....	do	211 50		do .....	do .....	do .....	
Lorenzo Moreno .....	do	211 50		do .....	do .....	do .....	
John Mullan .....	Dec. 2, 1871	10 00		Isaac N. Chapman .....	Township 12 north, range 8 west .....	do .....	
Joseph Merritt .....	Dec. 5, 1871	35 00	12 14	John Reed .....	Township 6 south, range 1 east .....	do .....	
Hiram C. Casey .....	Dec. 18, 1871	168 00		Hubbard Savage .....	Township 17 north, range 13 west .....	do .....	
Charles D. Osborne .....	do	118 50		do .....	Township 17 north, range 14 west .....	do .....	
Tappin Reeves .....	do	118 50		do .....	do .....	do .....	
Samuel Wheeler .....	do	118 50		do .....	do .....	do .....	
Daniel H. Osborne .....	do	118 50		do .....	do .....	do .....	
Riely Blackford .....	Dec. 19, 1871	10 00		Thomas Wright .....	Township 11 south, range 1 east .....	do .....	
Jochim Puls .....	do	2 00		William Magee .....	Township 26 north, range 3 west .....	do .....	
J. T. Harrington .....	Dec. 22, 1871	5 00		Denton D. Brown .....	Township 20 north, range 1 west .....	do .....	
Central Pacific R. R. Co. ....	Dec. 28, 1871	860 00					{ For lands listed to company; additional deposit to be made; survey suspended.
Ramon de la Cuesta .....	Jan. 3, 1872	390 00	548 55	William H. Norway .....	Township 6 north, range 32 west .....	San Bernardino .....	
H. A. Higley .....	Jan. 16, 1872	177 00			Townships 3 and 4 north, range 8 west .....	Mount Diablo .....	
P. W. Murphy .....	Jan. 18, 1872	36 00	36 00	Robert R. Harris .....	Township 30 south, range 13 east .....	do .....	
John Hawton .....	Jan. 23, 1872	60 00		William P. Reynolds .....	Township 6 south, range 8 west .....	San Bernardino .....	
Thomas M. Pursell .....	do	180 00		do .....	do .....	do .....	
William McKaig .....	Feb. 5, 1872	72 00	72 00	William Magee .....	Township 33 north, range 6 west .....	Mount Diablo .....	
P. E. Wicks .....	Feb. 6, 1872	20 00		T. J. Dewoody .....	Township 7 north, range 6 west .....	do .....	
A. Skaggs .....	Feb. 21, 1872	46 00		John B. Wood .....	Township 10 north, range 11 west .....	do .....	
David Urmsted .....	Feb. 28, 1872	57 50		William P. Reynolds .....	Township 1 south, range 13 west .....	San Bernardino .....	
Horatio S. Parcells .....	do	57 50		do .....	do .....	do .....	
R. S. Baker .....	Mar. 8, 1872	308 00		do .....	Township 3 north, range 17 west .....	do .....	
Charles Frederick .....	Mar. 15, 1872	141 00		A. H. Parker .....	Township 15 south, range 6 east .....	Mount Diablo .....	
Frank Hart .....	do	375 00		do .....	do .....	do .....	
T. J. Tucker .....	Mar. 20, 1872	10 00		William A. Pierce .....	Township 7 north, range 4 west .....	do .....	
H. C. Benson .....	do	25 00		T. A. Talleyrand .....	Township 1 north, range 1 west .....	do .....	
J. M. Pleasants .....	Mar. 22, 1872	15 00	14 96	E. H. Marshall .....	Township 7 north, range 2 west .....	do .....	
Francisco R. Cordosa .....	Mar. 29, 1872	225 00		Ezra Carpenter .....	Township 29 south, range 19 east .....	do .....	
Town trustees of "Yreka." ..	Mar. 30, 1872	67 50		A. M. Jones .....	Township 45 north, range 7 west .....	do .....	Town site of "Yreka." Town site of "Rough and Ready."
Inhabitants of "Rough and Ready." .....	Apr. 12, 1872	60 00		do .....	Township 42 north, range 9 west .....	do .....	
Richard H. Gilman .....	Apr. 15, 1872	42 00		I. N. Chapman .....	Township 9 north, range 11 west .....	do .....	
Benjamin Bushell .....	Apr. 23, 1872	16 00		Calvin P. Bailey .....	Township 17 south, range 6 east .....	do .....	
Erastus Wagner .....	May 6, 1872	52 00	47 13	William Magee .....	Township 31 north, range 1 west .....	do .....	
Michael Manning .....	May 15, 1872	111 00		George Tucker .....	Township 13 north, range 10 west .....	do .....	
Thomas Manning .....	do	111 00		do .....	do .....	do .....	



Espey and McNab	May 16, 1872	376 00		Hubbard Savage	Township 13 north, range 12 west	do
Alexander McNab	do	200 00		do	do	do
G. T. Espey	do	200 00		do	do	do
Robert Martin	June 3, 1872	145 00		George B. Tolman	Township 16 south, range 1 west	do
John Martin	do	145 00		do	do	do
Francis M. Kibler	June 4, 1872	273 75		William S. Powell	Township 20 south, range 27 east	do
Lewis B. Tulley	June 6, 1872	68 50		Francis L. Ripley	Township 18 south, range 9 east	do
James R. Wilkins	do	68 50		do	do	do
Michael Cody	do	68 50		do	do	do
John W. Hinds	do	68 50		do	do	do
Edward A. Tulley	do	68 50		do	do	do
Frank B. Tulley	do	18 50		do	do	do
William A. Marshall	do	68 50		do	do	do
Frank Q. Alvarez	do	68 50		do	do	do
Nat. C. Tulley	do	18 50		do	do	do
Richard W. Tulley	do	68 50		do	do	do
George W. Davis	June 8, 1872	122 00	509 50	William Magee	Township 33 north, ranges 7 and 8 west	do
John Taylor	do	70 00		do	Township 33 north, range 8 west	do
Olney Phillips	do	80 00		do	do	do
Christian Frick	do	80 00		do	do	do
James F. Hodley	do	80 00		do	do	do
M. W. Lowden	do	44 00		do	Township 33 north, range 9 west	do
John F. Wood	do	76 00		do	do	do
George W. Wood	do	80 00		do	do	do
John Cahill	June 18, 1872	197 60		Robert R. Harris	Township 23 south, range 16 east	do
John Welch	do	97 60		do	do	do
Thomas Rhodes	do	197 60		do	do	do
George Racine	do	197 60		do	do	do
William Todd	do	197 60		do	do	do
Peter Anderson	June 28, 1872	10 00		Rufus F. Herrick	Township 5 north, range 1 east	Humboldt
John J. Juhl	do	10 00		do	do	do
G. Swanson	do	10 00		do	do	do
Amos Foltz	do	10 00		do	do	do
Richard B. Turner	do	150 00		Ezra Carpenter	Township 26 south, range 16 east	Mount Diablo
B. F. Nosker	do	150 00		do	do	do
William C. Taylor	do	150 00		do	do	do
Henry Miller	do	150 00		do	do	do

J. R. HARDENBERGH,  
United States Surveyor General for California.



## J.—Statement of special deposits for the survey of mining claims in California during the fiscal year 1871-'72.

Name of depositor.	Date of deposit.	Amount of deposit.			Name of surveyor.	Name of mine.	Location of mine.	Remarks.
		Surveys.	Salaries.	Total.				
Allison Ranch Mining Company.	July 1, 1871	.....	\$65 00	\$65 00	Henry S. Bradley.	Allison Ranch Gold Quartz Mine	Nevada County...	Surveyor paid by claimant.
Red Hill Quicksilver Mining Company.	July 17, 1871	.....	65 00	65 00	T. J. Dewoody....	Red Hill Quicksilver Mine.....	Napa County.....	Do.
J. A. Ciderbergh.....	July 18, 1871	.....	65 00	65 00	J. M. Anderson..	Ciderbergh Gold Quartz Mine..	El Dorado County..	Do.
John Wade <i>et al</i> .....	July 18, 1871	.....	65 00	65 00	do .....	Sliger Gold Quartz Mine.....	do .....	Do.
Adolph Weske.....	July 29, 1871	\$65 00	65 00	130 00	E. C. Ureu.....	Weske Placer Mine.....	Placer County....	Do.
J. M. Glidden.....	Aug. 16, 1871	.....	65 00	65 00	W. L. McKim....	Newton Copper Mine .....	Amador County...	Do.
Miller, Staples & Co .....	Aug. 16, 1871	.....	25 00	25 00	J. M. Anderson..	Staples & Co.'s Gold Placer Mine	El Dorado County..	Do.
Chanter Marsh .....	Aug. 21, 1871	.....	25 00	25 00	Henry S. Bradley.	South Yuba Canal Placer Mine..	Nevada County...	Do.
C. T. Wheeler <i>et al</i> .....	Aug. 26, 1871	65 00	65 00	130 00	do .....	Lone Jack Quartz Mine.....	do .....	Do.
Sargent & Jacobs.....	Sept. 12, 1871	.....	65 00	65 00	do .....	Sargent & Jacobs Placer Mine ..	do .....	Do.
David W. Cary.....	Sept. 16, 1871	.....	65 00	65 00	D. B. Merry.....	Georgia Slide Placer Mine .....	El Dorado County..	Do.
Byrne and Walker.....	Sept. 18, 1871	.....	25 00	25 00	Henry S. Bradley.	Town Talk Placer Mine.....	Nevada County....	Do.
Bradley & Gardner .....	Sept. 22, 1871	.....	65 00	65 00	E. C. Ureu.....	Bradley & Gardner Placer Mine.	Placer County....	Do.
Uren & Uren .....	Sept. 22, 1871	.....	25 00	25 00	do .....	North Fork and Bear River Mine	do .....	Do.
C. A. Tuttle.....	Sept. 23, 1871	.....	65 00	65 00	do .....	Pond and Constable Placer Mine.	do .....	Do.
Biggs, Roberts & McGuire.	Sept. 23, 1871	.....	25 00	25 00	Newton C. Miller.	Biggs Placer Mine .....	Nevada County....	Do.
Franklin Miner.....	Sept. 25, 1871	65 00	65 00	130 00	E. C. Uren.....	Franklin Miner Placer Mine.....	Placer County....	Do.
R. M. Briggs.....	Sept. 25, 1871	.....	25 00	25 00	W. L. McKim....	Wild Cat Placer Mine .....	Amador County....	Do.
S. W. Bright .....	Sept. 26, 1871	.....	65 00	65 00	do .....	S. Bright Gold Quartz Mine .....	do .....	Do.
Oakville Mining Company.	Sept. 27, 1871	.....	65 00	65 00	T. J. Dewoody....	Oakville Quicksilver Mine .....	Napa County .....	Do.
Stanford, Downs & Co .....	Sept. 30, 1871	.....	65 00	65 00	W. L. McKim....	Lincoln Quartz Mine, South.....	Amador County....	Do.
Campbell & Stoddard .....	Oct. 4, 1871	65 00	65 00	130 00	J. G. Mather .....	Norambagua Gold Quartz Mine.	Nevada County....	Do.
Luetje and Schwartz.....	Oct. 7, 1871	.....	15 00	15 00	Henry S. Bradley.	Luetje and Schwartz Placer Mine	do .....	Do.
J. M. Hamilton.....	Oct. 13, 1871	.....	30 00	30 00	T. J. Dewoody....	Napa Quicksilver Mine .....	Napa County .....	Do.
Hamrick & Lyon .....	Oct. 18, 1871	.....	15 00	15 00	W. S. Cooper.....	Red Hill Placer Mine .....	Tuolumne County..	Do.
Stone, Watson <i>et al</i> .....	Oct. 20, 1871	.....	15 00	15 00	D. B. Merry.....	Crane's Gulch Placer Mine.....	El Dorado County..	Do.
Abraham Shear.....	Oct. 23, 1871	.....	30 00	30 00	Henry F. Terry...	Union Company's Gold Quartz Mine.	Calaveras County..	Do.
Hiltou & McPherson.....	Oct. 25, 1871	.....	15 00	15 00	A. B. Beauvais....	Hilton and McPherson Placer Mine.	Tuolumne County..	Do.
Baltic Gravel Mining Company.	Oct. 26, 1871	.....	15 00	15 00	James G. Mather.	Baltic Gravel Mining Company's Mine.	Nevada County....	Do.
Picayune Gravel Mining Company.	Oct. 26, 1871	.....	25 00	25 00	Henry S. Bradley.	Picayune Gold Placer Mine.....	do .....	Do.
I. C. Bateman .....	Oct. 30, 1871	.....	30 00	30 00	D. B. Merry.....	Saint Lawrence Gold Quartz Mine	El Dorado County..	Do.
G. K. Stevenot .....	Nov. 15, 1871	.....	30 00	30 00	A. B. Beauvais....	Stauslaus Gold Quartz Mine.....	Calaveras County..	Do.
S. T. Leet.....	Nov. 15, 1871	.....	15 00	15 00	Samuel Bethell....	Manhattan Placer Mine .....	Placer County....	Do.
Hall McAllister.....	Nov. 16, 1871	.....	30 00	30 00	W. L. McKim....	Summit Gold Quartz Mine.....	Amador County....	Do.
Simon H. Dikeman.....	Nov. 17, 1871	.....	15 00	15 00	Henry S. Bradley.	Dikeman Placer Mine .....	Nevada County....	Do.



John S. Colgrove.....	Nov. 22, 1871		30 00	30 00	E. C. Uren.....	Dutch Flat and Franklin Placer Mine.	Placer County ....	Do.
Adam Brown <i>et al.</i> .....	Nov. 22, 1871		30 00	30 00	do .....	Sailor Placer Mine.....	do .....	Do.
Thomas Fraser .....	Nov. 24, 1871		15 00	15 00	J. M. Anderson...	Olsen and Donaldson Placer Mine	El Dorado County.	Do.
Washington Quartz Mining Company.	Nov. 28, 1871		65 00	65 00	Denton D. Brown.	Washington Quartz Mine.....	Plumas County ...	Do.
Morehouse Mining Company	Nov. 29, 1871	65 00	30 00	95 00	Henry S. Bradley.	Morehouse Gold Quartz Mine...	Nevada County...	
John S. Colgrove.....	Dec. 4, 1871		35 00	35 00	E. C. Uren.....	Dutch Flat and Franklin Placer Mine.	Placer County ....	Do.
G. K. Stevenot .....	Dec. 7, 1871		30 00	30 00	A. B. Beauvais...	Enterprise Gold Quartz Mine ...	Calaveras County.	Do.
John Richards .....	Dec. 8, 1871		30 00	30 00	do .....	Richards Placer Mine .....	Tuolumne County.	Do.
G. W. Kling.....	Dec. 9, 1871		30 00	30 00	W. L. McKim ....	Eclipse Gold Quartz Mine .....	Amador County...	Do.
G. K. Stevenot .....	Dec. 11, 1871		30 00	30 00	A. B. Beauvais...	Reserve Gold Quartz Mine.....	Calaveras County.	Do.
G. K. Stevenot .....	Dec. 13, 1871		30 00	30 00	do .....	Santa Cruz Quartz Mine .....	do .....	Do.
D. B. Spagnoli .....	Dec. 14, 1871		65 00	65 00	W. L. McKim ....	Spagnoli Gold Quartz Mine .....	Amador County...	Do.
Thomas Fraser .....	Dec. 21, 1871		30 00	30 00	J. M. Anderson...	Dead Head Placer Mine.....	El Dorado County.	Do.
John Weiland <i>et al.</i> .....	Dec. 22, 1871		30 00	30 00	E. C. Uren.....	Powell Placer Mine .....	Placer County ....	Do.
B. D. Rodman.....	Dec. 23, 1871	65 00	30 00	95 00	Henry S. Bradley.	Luean Gold Quartz Mine .....	Yuba County .....	
J. H. Nash.....	Dec. 30, 1871		35 00	35 00	J. M. Anderson...	Rising Hope Placer Mine .....	El Dorado County.	Do.
Charles Marsh.....	Jan. 2, 1872		65 00	65 00	Henry S. Bradley.	Harmony Company's Placer Mine	Nevada County...	Do.
John Nisbet .....	Jan. 10, 1872		30 00	30 00	James McGann...	Nisbet Quartz Mine.....	Butte County....	Do.
Thomas Fraser .....	Jan. 11, 1872		30 00	30 00	J. M. Anderson...	O'Brien and Tulley Placer Mine.	El Dorado County.	Do.
M. Walthall.....	Jan. 13, 1872		30 00	30 00	Jarves Kiel.....	John S. Diltz Quartz Mine .....	Mariposa County .	Do.
M. Walthall.....	Jan. 20, 1872	65 00	30 00	95 00	Henry F. Terry...	Calaveras Copper Mine .....	Calaveras County.	
John Mullan, attorney .....	Jan. 20, 1872		30 00	30 00	J. M. Anderson...	Rocky Bend Gold Quartz Mine...	El Dorado County.	Do.
Charles F. Straube.....	Jan. 22, 1872		30 00	30 00	E. C. Uren.....	Elmore Hill Placer Mine.....	Placer County ....	Do.
Henry F. Terry.....	Jan. 26, 1872		30 00	30 00	Henry F. Terry...	San Bruno Quartz Mine.....	Calaveras County.	Do.
Samuel L. Prindle.....	Feb. 6, 1872		20 00	20 00	do .....	Red Hill Placer Mine .....	do .....	Do.
James W. Tyson.....	Feb. 8, 1872		30 00	30 00	A. B. Beauvais...	Tyson Iron and Copper Mine....	Tuolumne County.	Do.
W. F. Coe.....	Feb. 10, 1872		25 00	25 00	D. B. Merry.....	Railroad Placer Mine .....	El Dorado County.	Do.
James McMullan .....	Feb. 12, 1872		25 00	25 00	William Magee...	McMullan and Reese Placer Mine	Shasta County ....	Do.
Woolsten Banghart .....	Feb. 12, 1872		30 00	30 00	do .....	Banghart Quartz Mine.....	do .....	Do.
F. J. Herman.....	Feb. 16, 1872	65 00	40 00	105 00	A. B. Beauvais...	Teeumseh Gold, Silver, and Copper Mine.	Calaveras County.	
Frank Hoffman .....	Feb. 23, 1872		35 00	35 00	Samuel Bethell...	Frank Hoffman Placer Mine ....	Placer Mine .....	Do.
E. C. Uren .....	Feb. 27, 1872		30 00	30 00	E. C. Uren .....	Bear River Placer Mine.....	Placer County ....	Do.
Do .....	Feb. 27, 1872		30 00	30 00	do .....	Mutual Placer Mine .....	do .....	Do.
B. F. Richtmyer.....	Feb. 29, 1872		35 00	35 00	W. L. McKim ....	Gover Gold Quartz Mine.....	Amador County...	Do.
A. Weske.....	Mar. 1, 1872		50 00	50 00	Samuel Bethell...	Yulee and Willey Placer Mine ..	Placer County ....	Do.
John D. Boop .....	Feb. 27, 1872		30 00	30 00	J. M. Anderson ..	Bobby Burns Quartz Mine .....	El Dorado County.	Do.
A. S. Seieffard.....	Mar. 11, 1872		30 00	30 00	Henry F. Terry ...	Everlasting Gold Quartz Mine ..	Calaveras County.	Do.
W. A. Roberts .....	Mar. 13, 1872		20 00	20 00	H. S. Bradley.....	Manzanita Placer Mine .....	Nevada County...	Do.
A. Hayward .....	Mar. 13, 1872		30 00	30 00	W. L. McKim.....	Hazard Gold Quartz Mine.....	Amador County...	Do.
Do .....	Mar. 13, 1872		30 00	30 00	do .....	Nevada Gold Quartz Mine .....	do .....	Do.
Do .....	Mar. 13, 1872		30 00	30 00	do .....	Last Chance Quartz Mine.....	do .....	Do.
Eclipse Quartz Mining Company.	Mar. 20, 1872	65 00	30 00	95 00	E. C. Uren .....	Eclipse Quartz Mine .....	Placer County ....	
Peter Davis.....	Mar. 26, 1872		30 00	30 00	Henry F. Terry ...	Hudson Quartz Mine.....	Calaveras County.	Do.
Wisconsin Quartz Mining Company.	Mar. 29, 1872		30 00	30 00	James G. Mather..	Wisconsin Quartz Mine.....	Nevada County...	Do.
Robert Aitken.....	Apr. 1, 1872		30 00	30 00	W. L. McKim.....	Clyde Gold Quartz Mine .....	Amador County...	Do.
Niles Searles.....	Apr. 6, 1872		40 00	40 00	Henry S. Bradley..	Keystone Placer Mine .....	Nevada County...	Do.



## J.—Statement of special deposits for the survey of mining claims in California during the fiscal year 1871-'72—Continued.

Name of depositor.	Date of deposit.	Amount of deposit.			Name of surveyor.	Name of mine.	Location of mine.	Remarks.
		Surveys.	Salaries.	Total.				
Henry Gennochio .....	Apr. 9, 1872	.....	\$30 00	\$30 00	W. L. McKim .....	Italian Quartz Mine .....	Amador County...	Surveyor paid by claimant.
J. A. Eagon .....	Apr. 9, 1872	.....	30 00	30 00	do .....	North Star Quartz Mine .....	do .....	Do.
McBride & Bowen .....	Apr. 13, 1872	.....	35 00	35 00	Samuel Bethell .....	Red Hill Placer Mine .....	Placer County .....	Do.
H. Hampton .....	Apr. 13, 1872	.....	35 00	35 00	A. B. Beauvais .....	Confidence Quartz Mine .....	Tuolumne County .....	Do.
John Scribner .....	Apr. 13, 1872	.....	30 00	30 00	do .....	Carson Creek Quartz Mine .....	Calaveras County .....	Do.
G. M. Tatten .....	Apr. 18, 1872	.....	30 00	30 00	do .....	App Gold Quartz Mine .....	Tuolumne County .....	Do.
J. C. Murchie .....	Apr. 19, 1872	.....	20 00	20 00	Henry S. Bradley .....	Murchie Placer Mine .....	Nevada County .....	Do.
Rumble & Blessing .....	Apr. 24, 1872	.....	60 00	60 00	E. C. Uren .....	"Nary Red" Placer Mine .....	Placer County .....	Do.
Last Chance Gold and Silver Mining Company.	Apr. 24, 1872	\$65 00	30 00	95 00	Henry S. Bradley .....	Last Chance G. and S. Mine .....	Nevada County .....	
El Dorado Quartz Mining Company.	Apr. 24, 1872	.....	30 00	30 00	W. L. McKim .....	El Dorado Quartz Mine .....	Amador County .....	Do.
Dewitt C. Gaskell .....	Apr. 27, 1872	.....	25 00	25 00	Denton D. Brown .....	Ohio Flat Placer Mine .....	Yuba County .....	Do.
Isaac Hayt .....	May 2, 1872	.....	20 00	20 00	do .....	Hartman Placer Mine .....	Amador County .....	Do.
Middle Yuba Mining Company.	May 3, 1872	100 00	60 00	160 00	Edward E. Eddy .....	Middle Yuba Placer Mine .....	Nevada County .....	
Elisha Holmes .....	May 7, 1872	.....	25 00	25 00	D. B. Merry .....	Soilor Slide Placer Mine .....	El Dorado County .....	Do.
George Ran & Co .....	May 7, 1872	.....	30 00	30 00	J. M. Anderson .....	Rowe & Co.'s Placer Mine .....	do .....	Do.
D. T. Shoemaker .....	May 7, 1872	.....	20 00	20 00	do .....	Shoemaker Placer Mine .....	do .....	Do.
Peyton Powell .....	May 9, 1872	.....	40 00	40 00	E. C. Uren .....	United States Gold Placer Mine .....	Placer County .....	Do.
Do .....	May 9, 1872	.....	60 00	60 00	do .....	Big Channel Placer Mine .....	do .....	Do.
Havens & Gray .....	May 11, 1872	.....	50 00	50 00	Chas. W. Hendel .....	Independence Quartz Mine .....	Sierra County .....	Do.
John Finn .....	May 17, 1872	.....	20 00	20 00	A. B. Beauvais .....	Finn Placer Mine .....	Tuolumne County .....	Do.
San Benito Quicksilver Mining Company.	May 22, 1872	.....	25 00	25 00	S. W. Smith .....	New York Quicksilver Mine .....	Monterey County .....	Do.
Do .....	May 22, 1872	.....	25 00	25 00	do .....	Don Miguel Quicksilver Mine .....	do .....	Do.
Do .....	May 22, 1872	.....	25 00	25 00	do .....	Don Juan Quicksilver Mine .....	do .....	Do.
Do .....	May 22, 1872	.....	25 00	25 00	do .....	Pennsylvania Quicksilver Mine .....	do .....	Do.
S. O. Putnam .....	May 24, 1872	.....	30 00	30 00	Henry F. Terry .....	Wolverine Quartz Mine .....	Calaveras County .....	Do.
George W. Fee <i>et al</i> .....	May 28, 1872	.....	20 00	20 00	D. B. Merry .....	Hart Placer Mine .....	El Dorado County .....	Do.
S. O. Putnam .....	June 6, 1872	.....	30 00	30 00	Henry F. Terry .....	Poor Man Quartz Mine .....	Calaveras County .....	Do.
L. B. Ayer .....	June 6, 1872	.....	50 00	50 00	James G. Mather .....	Red Rock Tunnel Placer Mine .....	Nevada County .....	Do.
James Watson .....	June 7, 1872	.....	30 00	30 00	A. B. Beauvais .....	Democrat Quartz Mine .....	Calaveras County .....	Do.
Williams & Johnson .....	June 7, 1872	.....	40 00	40 00	Henry S. Bradley .....	Badger Hill and Cherokee Placer Mine .....	Nevada County .....	Do.
G. K. Stevenot & W. Jeffary.	June 10, 1872	.....	30 00	30 00	A. B. Beauvais .....	Melones or Point Rock Gold Quartz Mine .....	Calaveras County .....	Do.
J. M. English .....	June 11, 1872	65 00	30 00	95 00	Henry S. Bradley .....	J. M. English, Quartz Mine .....	Nevada County .....	
Gorham P. Beale .....	June 12, 1872	.....	30 00	30 00	E. C. Uren .....	Dutch Flat Cañon Placer Mine .....	Placer County .....	Do.
Otis Perrin .....	June 15, 1872	.....	30 00	30 00	A. B. Beauvais .....	Finnigan Quartz Mine .....	Calaveras County .....	Do.



Otis Perrin.....	June 15, 1872	.....	30 00	30 00	.....do .....	Dead Horse Quartz Mine.....	.....do .....	Surveyor paid by claimant.
R. Burnell.....	June 17, 1872	.....	30 00	30 00	.....do .....	Stickle Quartz Mine.....	.....do .....	Do.
William Smith.....	June 26, 1872	65 00	30 00	95 00	Henry S. Bradley..	Saint John Quartz Mine.....	Nevada County...	
Thomas Sorrocco.....	June 29, 1872	.....	20 00	20 00	Benjamin Ross....	Sorrocco Placer Mine .....	Amador County...	Do.
Henry F. Terry .....	June 29, 1872	.....	30 00	30 00	Henry F. Terry...	Woodhouse Quartz Mine .....		Do.

J. R. HARDENBERGH,  
*United States Surveyor General for California.*



K.—Statement of account of appropriation for the survey of public lands in California during the fiscal year 1871-'72.

Date of ac- count.	In favor of—	Date of con- tract.	Amount.	Date.	On account of—	Amount.
Nov. 14, 1871	Wilfred F. Ingalls .....	June 15, 1871	\$7, 182 30	July 1, 1871	By appropriation of March 3, 1871.....	\$70, 000 00
Nov. 28, 1871	John M. Ingalls .....	June 15, 1871	6, 868 25			
Jan. 20, 1872	George Small.....	July 15, 1871	5, 398 07			
Feb. 9, 1872	Alexander McKay.....	July 15, 1871	9, 988 58			
Feb. 24, 1872	Wilfred F. Ingalls.....	June 15, 1871	5, 400 38			
Mar. 11, 1872	George Small .....	July 15, 1871	600 45			
Apr. 20, 1872	John M. Ingalls.....	June 15, 1871	5, 833 45			
May 20, 1872	Isaac N. Chapman .....	Dec. 11, 1871	172 91			
May 22, 1872	William Minto.....	Aug. 9, 1871	4, 046 90			
July 12, 1872	Isaac N. Chapman .....	Nov. 7, 1871	863 71			
Aug. 31, 1872	John C. Partridge.....	June 25, 1871	3, 236 92			
Aug. 31, 1872	do.....	July 20, 1871	6, 947 10			
	Eben H. Dyer .....	May 1, 1872	799 29			
	Balance of appropriation applicable to contracts made previous to June 30, 1872, as shown below.		12, 661 69			
			70, 000 00			70, 000 00
	William H. Carlton.....	Aug. 1, 1871	2, 000 00		By balance of appropriation applicable to contracts made pre- vious to June 30, 1872.	12, 661 69
	William Minto.....	Ins. Jan. 29, '72	500 00			
	Do.....	Apr. 9, 1872	800 00			
	Do.....	Apr. 15, 1872	200 00			
	Wilfred F. Ingalls .....	May 1, 1872	3, 000 00			
	F. L. Ripley .....	June 6, 1872	900 00			
	Ephraim Dyer.....	June 26, 1872	4, 500 00			
	Balance reserved for excess in unlimited contracts .....		761 69			
			12, 661 69			12, 661 69

J. R. HARDENBERGH,  
United States Surveyor General for California.



L.—Statement of account of appropriation for office rent, stationery, pay of messenger, and incidental expenses of the office of the United States surveyor general for California for the fiscal year ending June 30, 1872.

1871. Sept. 30	To amount paid in July, August, and September, first quarter.	\$2,190 48	1871. June 30	By appropriation by act of March 3, 1871, for the fiscal year ending June 30, 1872.	\$7,000 00
Dec. 31	To amount paid in October, November, and December, second quarter.	1,636 19			
1872. Mar. 31	To amount paid in January, February, and March, third quarter.	1,553 81			
June 30	To amount paid in April, May, and June, fourth quarter.	1,615 43			
	Total .....	6,995 91		Total .....	7,000 00
			1872. June 30	By appropriation by act of June 10, 1872, for the fiscal year ending June 30, 1873.	7,000 00

J. R. HARDENBERGH,  
United States Surveyor General for California.

M.—Account of appropriation for the salary of surveyor general for California for the fiscal year ending June 30, 1872.

DR.			CR.		
Sept. 30, 1871	To account of J. R. Hardenbergh for 1st quarter.	\$750	Mar. 3, 1871	By appropriation for salary of surveyor general for California.	\$3,000
Dec. 31, 1871	To account of J. R. Hardenbergh for 2d quarter.	750			
Mar. 31, 1871	To account of J. R. Hardenbergh for 3d quarter.	750			
June 30, 1871	To account of J. R. Hardenbergh for 4th quarter.	750			
		3,000			3,000

J. R. HARDENBERGH,  
United States Surveyor General for California.

N.—Statement of account of appropriation for compensation of clerks and draughtsmen in office of the United States surveyor general for California for the fiscal year ending June 30, 1872.

DR.			CR.		
1871. Sept. 30	To amount paid clerks and draughtsmen: For first quarter, ending September 30, 1871.	\$3,785 87	1871. July 1	By appropriation of March 3, 1871, as advised by Commissioner's letter dated April 28, 1871.	\$11,000 00
Dec. 31	For second quarter, ending December 31, 1871.	4,225 00		By amount drawn from the fund of "deposits by individuals."	9,279 55
1872. Mar. 31	For third quarter, ending March 31, 1872.	6,303 84			
June 30	For fourth quarter, ending June 30, 1872.	5,964 84			
	Total .....	20,279 55		Total .....	20,279 55
			1872. July 1	By appropriation by act of June 10, 1872, for the fiscal year ending June 30, 1873, as advised by Commissioner's letter dated June 17, 1872.	26,000 00

J. R. HARDENBERGH,  
United States Surveyor General for California.



O.—Statement of special individual deposits with the United States assistant treasurer at San Francisco during the fiscal year 1871-'72, for compensation of clerks and draughtsmen in office of the United States surveyor general for California.

Date of deposit.	Name of depositor.	Location of survey.	Meridian.	Amount of deposit.
July 1, 1871	Allison Ranch Mining Co.	Allison Ranch Mine.....		\$65 00
July 17, 1871	Red Hill Quicksilver Mining Company.	Red Hill Quicksilver Mine.....		65 00
July 18, 1871	J. A. Ciderbergh.....	Ciderbergh Gravel Quartz Mine.....		65 00
July 18, 1871	John Wade <i>et al.</i> .....	Sliger Gold Quartz Mine.....		65 00
July 29, 1871	Adolph Weske.....	Weske Placer Mine.....		65 00
Aug. 16, 1871	J. M. Glidden.....	Newton Copper Mine.....		25 00
Aug. 16, 1871	Miller, Staples & Co.....	Staples & Co.'s Placer Mine.....		25 00
Aug. 21, 1871	Chanler Marsh.....	South Yuba Canal Company's Placer Mine.		65 00
Aug. 26, 1871	C. T. Wheeler <i>et al.</i> .....	Lone Jack Gold Quartz Mine.....		65 00
Sept. 12, 1871	Sargent & Jacobs.....	Sargent & Jacobs' Placer Mine.....		65 00
Sept. 16, 1871	David W. Carey.....	Georgia Slide Gold Placer Mine.....		25 00
Sept. 18, 1871	Byrne & Walker.....	Town Talk Gold Placer Mine.....		65 00
Sept. 22, 1871	Bradley & Gardner.....	Bradley & Gardner Gold Placer Mine.		25 00
Sept. 22, 1871	Uren & Uren.....	North Fork and Bear River Placer Mine.		65 00
Sept. 23, 1871	C. A. Tuttle, attorney.....	Pond & Constable Placer Mine.....		25 00
Sept. 23, 1871	Biggs, Roberts & McGuire.	Biggs Placer Mine.....		65 00
Sept. 25, 1871	Franklin Miner.....	Franklin Miner Placer Mine.....		25 00
Sept. 25, 1871	R. M. Briggs.....	Wild Cat Gold Placer Mine.....		65 00
Sept. 26, 1871	S. W. Bright.....	S. Bright Gold Quartz Mine.....		65 00
Sept. 27, 1871	Oakville Mining Company.	Oakville Quicksilver Mine.....		65 00
Sept. 30, 1871	Stanford, Downs & Co.....	Lincoln Quartz Mine South.....		65 00
Oct. 4, 1871	Campbell & Stoddard.....	Norambagua Gold Quartz Mine.....		15 00
Oct. 7, 1871	Luetje & Schwartz.....	Luetje & Schwartz Gold Placer Mine.		30 00
Oct. 13, 1871	J. M. Hamilton.....	Napa Quicksilver Mine.....		15 00
Oct. 18, 1871	Hamrick & Lyon.....	Red Hill Placer Mine, Tuolumne County.		15 00
Oct. 20, 1871	Stone, Watson & Whiteside	Crane's Gulch Gold Placer Mine.....		30 00
Oct. 23, 1871	Abraham Shear.....	Union Company's Gold Quartz Mine.....		15 00
Oct. 25, 1871	Hilton & McPherson.....	Hilton & McPherson Placer Mine.....		15 00
Oct. 26, 1871	Baltic Gravel Mining Company.	Baltic Gravel Mining Company's Gold Placer Mine.		25 00
Oct. 26, 1871	Picayune Gravel Mining Company.	Picayune Gold Placer Mine.....		30 00
Oct. 30, 1871	J. C. Bateman.....	Saint Lawrence Gold Quartz Mine.....		30 00
Nov. 15, 1871	G. K. Stevenot.....	Stanislaus Gold Quartz Mine.....		15 00
Nov. 15, 1871	S. T. Leet.....	Manhattan Gold Placer Mine.....		30 00
Nov. 16, 1871	Hall McAllister.....	Summit Gold Quartz Mine.....		15 00
Nov. 17, 1871	S. H. Dikeman.....	Simon H. Dikeman Gold Placer Mine.		30 00
Nov. 22, 1871	John S. Colgrove.....	Dutch Flat and Franklin Gold Placer Mine.		30 00
Nov. 22, 1871	Adam Brown <i>et al.</i> .....	Sailor or Brown & Co.'s Placer Mine.....		15 00
Nov. 24, 1871	Thomas Fraser.....	Olson & Donaldson Placer Mine.....		65 00
Nov. 28, 1871	Washington Quartz Mining Company.	Washington Gold Quartz Mine.....		30 00
Nov. 29, 1871	Moorehouse Mining Co.....	Moorehouse Gold Quartz Mine.....		35 00
Dec. 4, 1871	John S. Colgrove.....	Dutch Flat and Franklin Placer Mine.		30 00
Dec. 7, 1871	G. K. Stevenot.....	Enterprise Gold Quartz Mine.....		30 00
Dec. 8, 1871	John Richards.....	Richards Gold Placer Mine.....		30 00
Dec. 9, 1871	C. W. Kling.....	Eclipse Gold Quartz Mine.....		30 00
Dec. 11, 1871	G. K. Stevenot.....	Reserve Gold Quartz Mine.....		30 00
Dec. 13, 1871	do.....	Santa Cruz Gold Quartz Mine.....		65 00
Dec. 14, 1871	D. B. Spagnoli.....	Spagnoli Gold Quartz Mine.....		30 00
Dec. 21, 1871	Thomas Fraser.....	Dead Head Gold Placer Mine.....		30 00
Dec. 22, 1871	John Weiland <i>et al.</i> .....	Powell Gold Placer Mine.....		30 00
Dec. 28, 1871	B. D. Rodman.....	Lucan Gold Quartz Mine.....		35 00
Dec. 30, 1871	J. H. Nash.....	Rising Hope Gold Placer Mine.....		65 00
Jan. 2, 1872	Charles Marsh.....	Harmony Company's Placer Mine.....		30 00
Jan. 10, 1872	John Nisbet.....	Nisbet Gold Quartz Mine.....		30 00
Jan. 11, 1872	Thomas Fraser.....	O'Brien & Tulley Placer Mine.....		30 00
Jan. 13, 1872	M. Walthall.....	John S. Diltz Gold Quartz Mine.....		30 00
Jan. 20, 1872	do.....	Calaveras Copper Mine.....		30 00
Jan. 20, 1872	John Mullan, attorney.....	Rocky Bend Gold Quartz Mine.....		30 00
Jan. 22, 1872	C. F. Straube.....	Elmore Hill Gold Placer Mine.....		30 00
Jan. 26, 1872	Henry F. Terry.....	San Bruno Gold Quartz Mine.....		20 00
Feb. 6, 1872	Samuel L. Prindle.....	Red Hill Gold Placer Mine.....		30 00
Feb. 8, 1872	James W. Tyson.....	Tyson Iron and Copper Mine.....		25 00
Feb. 10, 1872	W. F. Coe.....	Railroad Gold Placer Mine.....		25 00
Feb. 12, 1872	James McMullan.....	McMullan & Reese Placer Mine.....		30 00
Feb. 12, 1872	Woolsten Banghart.....	Banghart Gold Quartz Mine.....		



## O.—Statement of special individual deposits, &amp;c.—Continued.

Date of deposit.	Name of depositor.	Location of survey.	Meridian.	Amount of deposit.
Feb. 16, 1872	F. J. Herman .....	Tecumseh Gold, Silver, and Copper Mine.		\$40 00
Feb. 23, 1872	Frank. Hoffman .....	Frank Hoffman Gold Placer Mine.		35 00
Feb. 27, 1872	E. C. Uren .....	Bear River Gold Placer Mine .....		30 00
Feb. 27, 1872	E. C. Uren .....	Mutual Gold Placer Mine .....		30 00
Feb. 29, 1872	B. F. Rightmeyer .....	Gover Gold Quartz Mine .....		35 00
Feb. 27, 1872	John D. Boop .....	Bobby Burns Gold Quartz Mine .....		30 00
Mar. 1, 1872	Adolphe Weske .....	Yule & Willey Gold Placer Mine .....		50 00
Mar. 11, 1872	A. S. Scieffard .....	Everlasting Gold Quartz Mine .....		30 00
Mar. 13, 1872	W. A. Roberts .....	Manzanita Gold Placer Mine .....		20 00
Mar. 13, 1872	A. Hayward .....	Hazard Gold Quartz Mine .....		30 00
Mar. 13, 1872	A. Hayward .....	Nevada Gold Quartz Mine .....		30 00
Mar. 13, 1872	A. Hayward .....	Last Chance Gold Quartz Mine .....		30 00
Mar. 20, 1872	Eclipse Quartz Mining Co.	Eclipse Gold Quartz Mine .....		30 00
Mar. 26, 1872	Peter Davis .....	Hudson Gold Quartz Mine .....		30 00
Mar. 29, 1872	Wisconsin Quartz Mining Company.	Wisconsin Gold Quartz Mine .....		30 00
April 1, 1862	Robert Aitken .....	Clyde Gold Quartz Mine .....		30 00
April 6, 1872	Niles Searles .....	Keystone Gold Placer Mine .....		40 00
April 9, 1872	Henry Genochio .....	Italian Gold Quartz Mine .....		30 00
April 9, 1872	J. A. Eagan .....	North Star Gold Quartz Mine .....		30 00
April 13, 1872	McBride & Bowen .....	Red Hill Gold Placer Mine .....		35 00
April 13, 1872	H. Hampton .....	Confidence Gold Quartz Mine .....		35 00
April 13, 1872	John Scribner .....	Carson Creek Gold Quartz Mine .....		30 00
April 18, 1872	G. M. Tatten .....	App Gold Quartz Mine .....		30 00
April 19, 1872	J. C. Murchie .....	Murchie Gold Placer Mine .....		20 00
April 24, 1872	Rumble & Blessing .....	Nary Red Gold Placer Mine .....		60 00
April 24, 1872	Last Chance Gold and Silver Mining Company.	Last Chance Gold and Silver Quartz Mine.		30 00
April 24, 1872	El Dorado Quartz Mining Company.	El Dorado Gold Quartz Mine .....		30 00
April 27, 1872	Dewitt C. Gaskell .....	Ohio Flat Gold Placer Mine .....		25 00
May 2, 1872	Isaac Hoyt .....	Hartman Gold Placer Mine .....		20 00
May 3, 1872	Middle Yuba Mining Co.	Middle Yuba Placer Mine .....		60 00
May 7, 1872	Elisha Holmes .....	Sailor Slide Gold Placer Mine .....		25 00
May 7, 1872	George Rowe & Co. ....	Rowe & Co.'s Placer Mine .....		30 00
May 7, 1872	D. F. Shoemaker .....	Shoemaker Gold Placer Mine .....		20 00
May 9, 1872	Peyton Powell .....	United States Co.'s Placer Mine .....		40 00
May 9, 1872	Peyton Powell .....	Big Channel Gold Placer Mine .....		60 00
May 11, 1872	Havens & Gray .....	Independence Gold Quartz Mine .....		50 00
May 17, 1872	John Finn .....	Finn Gold Placer Mine .....		20 00
May 22, 1872	San Benito Quicksilver Mining Company.	New York Quicksilver Mine .....		25 00
May 22, 1872	San Benito Quicksilver Mining Company.	Don Miguel Quicksilver Mine .....		25 00
May 22, 1872	San Benito Quicksilver Mining Company.	Don Juan Quicksilver Mine .....		25 00
May 22, 1872	San Benito Quicksilver Mining Company.	Pennsylvania Quicksilver Mine .....		30 00
May 24, 1872	S. O. Putnam .....	Wolverine Gold Quartz Mine .....		50 00
May 23, 1872	George W. Fee <i>et al.</i> .....	Hart Gold Placer Mine .....		30 00
June 6, 1832	S. O. Putnam .....	Poor Man Gold Quartz Mine .....		40 00
June 6, 1872	L. B. Ayer .....	Bed Rock Tunnel Placer Mine .....		
June 7, 1872	James Watson .....	Democrat Gold Quartz Mine .....		30 00
June 7, 1872	Williams & Johnson .....	Badger Hill and Cherokee Placer Mine.		30 00
June 10, 1872	G. K. Stevenot <i>et al.</i> .....	Melones or Point Rock Gold Quartz Mine.		30 00
June 11, 1872	J. M. English .....	J. M. English Gold Quartz Mine .....		
June 12, 1872	Gorham P. Beale .....	Dutch Flat Cañon Placer Mine .....		30 00
June 15, 1872	Otis Perrin .....	Finegan Gold Quartz Mine .....		
June 15, 1872	Otis Perrin .....	Dead Horse Gold Quartz Mine .....		30 00
June 17, 1872	R. Burnell .....	Stickle Gold Quartz Mine .....		30 00
June 26, 1872	William Smith .....	St. John Gold Quartz Mine .....		30 00
June 29, 1872	Thomas Sorrocco .....	Sorrocco Gold Quartz Mine .....		20 00
June 29, 1872	Henry F. Terry .....	Woodhouse Gold Quartz Mine .....		30 00
Total amount deposited for office work on mining surveys .....				4,210 00
July 10, 1871	Hiram Manasse .....	Township 12 south, range 1 west.	San Bernardino	40 00
July 11, 1871	Green Bartlet .....	Township 15 north, range 8 west.	Mount Diablo.	35 00
July 12, 1871	Central Pacific Railroad ..	For lands listed to the company.		143 33
July 18, 1871	John Perry .....	Township 5 north, range 15 east.	Mount Diablo.	65 00
July 22, 1871	J. J. Wilcoxson .....	Township 15 north, range 4 west.	do.	27 00
July 25, 1871	Western Pacific Railroad Company.	Township 3 south, range 2 west.	do.	25 00
July 27, 1871	M. A. Britton .....	Township 14 north, range 4 west.	do.	10 00
July 29, 1871	Frank Staples .....	Township 18 north, range 4 west.	do.	40 00



## O.—Statement of special individual deposits, &amp;c.—Continued.

Date of deposit.	Name of depositor.	Location of survey.	Meridian.	Amount of deposit.
Aug. 14, 1871	Central Pacific Railroad Co	For lands listed to the company...		\$145 00
Aug. 18, 1871	Sperry & Perry.....	Township 5 north, range 16 east..	Mount Diablo..	60 00
Aug. 21, 1871	G. W. Scott.....	Township 9 north, range 2 west..	do.....	15 00
Aug. 21, 1871	M. A. Britton.....	Township 14 north, range 4 west..	do.....	20 00
Aug. 21, 1871	M. C. Dodge.....	Township 8 south, range 5 west..	do.....	10 00
Aug. 23, 1871	W. S. Green.....	Township 15 north, range 5 west..	do.....	20 00
Sept. 9, 1871	C. D. Wyeoff.....	Township 21 north, range 14 east..	do.....	15 00
Sept. 9, 1871	Peter Schutts.....	Township 21 north, range 14 east..	do.....	15 00
Sept. 12, 1871	Isaac Ramba.....	Township 26 north, range 4 west..	do.....	32 50
Sept. 12, 1871	Jacob Ramba.....	Township 26 north, range 4 west..	do.....	32 50
Sept. 18, 1871	Henry Seaman.....	Township 8 north, range 2 west..	do.....	10 00
Sept. 25, 1871	W. F. Rowe.....	Township 14 north, range 7 west..	do.....	25 00
Sept. 25, 1871	E. A. Rowe.....	Township 14 north, range 7 west..	do.....	25 00
Sept. 30, 1871	Albert Towers.....	Township 31 south, range 16 east..	do.....	18 00
Sept. 30, 1871	José Dorane.....	Township 31 south, range 16 east..	do.....	16 00
Sept. 30, 1871	Loreto Vasquez.....	Township 31 south, range 16 east..	do.....	16 00
Oct. 5, 1871	S. L. Hogan.....	Township 5 south, range 21 east..	do.....	11 60
Oct. 5, 1871	Edwin Moore.....	Township 5 south, range 21 east..	do.....	12 50
Oct. 5, 1871	Galen Clarke.....	Township 5 south, range 21 east..	do.....	12 50
Oct. 5, 1871	Galen A. Clarke.....	Township 5 south, range 21 east..	do.....	12 50
Oct. 12, 1871	J. P. Thompson.....	Township 5 south, range 20 east..	do.....	5 00
Oct. 12, 1871	S. E. Magoon.....	Township 5 south, range 20 east..	do.....	7 00
Oct. 12, 1871	J. J. Westfall.....	Township 5 south, range 20 east..	do.....	6 50
Oct. 12, 1871	James M. Harris.....	Township 5 south, range 20 east..	do.....	5 00
Oct. 12, 1871	C. M. Westfall.....	Township 5 south, range 20 east..	do.....	6 50
Oct. 20, 1871	Pleasant Smith.....	Township 11 north, range 6 west..	do.....	25 00
Oct. 26, 1871	George Davis.....	Township 8 north, range 3 west..	do.....	30 00
Nov. 14, 1871	George Ashurt.....	Township 17 south, range 12 east..	do.....	25 00
Nov. 14, 1871	William Williams.....	Township 17 south, range 12 east..	do.....	25 00
Nov. 14, 1871	J. Crowningshield.....	Township 17 south, range 12 east..	do.....	25 00
Nov. 14, 1871	José M. Larios.....	Township 17 south, range 12 east..	do.....	25 00
Nov. 14, 1871	J. Ashurt.....	Township 17 south, range 11 east..	do.....	25 00
Nov. 14, 1871	R. F. Canaya.....	Township 17 south, range 11 east..	do.....	25 00
Nov. 27, 1871	José M. Lopez.....	Township 32 south, range 16 east..	do.....	17 00
Nov. 27, 1871	Levi Raeliffe.....	Township 32 south, range 16 east..	do.....	16 50
Nov. 27, 1871	Lorenzo Moreno.....	Township 32 south, range 16 east..	do.....	10 00
Dec. 2, 1871	John Mullan.....	Township 12 north, range 8 west..	do.....	25 00
Dec. 5, 1871	Joseph Merritt.....	Township 6 south, range 1 east..	do.....	25 00
Dec. 5, 1871	W. R. Mathews.....	Township 11 north, range 6 west..	do.....	40 00
Dec. 18, 1871	Hiram C. Casey.....	Township 17 north, range 13 west..	do.....	12 50
Dec. 18, 1871	Charles D. Osborne.....	Township 17 north, range 14 west..	do.....	12 50
Dec. 18, 1871	Tappin Reeves.....	Township 17 north, range 14 west..	do.....	12 50
Dec. 18, 1871	Samuel Wheeler.....	Township 17 north, range 14 west..	do.....	12 50
Dec. 18, 1871	Daniel H. Osborne.....	Township 17 north, range 14 west..	do.....	25 00
Dec. 19, 1871	Reily Blackford.....	Township 11 south, range 1 east..	do.....	50 00
Dec. 19, 1871	Jochim Puls.....	Township 26 north, range 3 west..	do.....	50 00
Dec. 22, 1871	J. T. Harrington.....	Township 20 north, range 1 west..	do.....	344 00
Dec. 28, 1871	Central Pacific Railroad Company.	For lands listed to the company...		
Jan. 3, 1872	R. de la Cuesta.....	Township 6 north, range 32 west..	San Bernardino	50 00
Jan. 16, 1872	H. A. Higley.....	Townships 3 and 4 north, range 8 west.	Mount Diablo..	100 00
Jan. 18, 1872	P. W. Murphy.....	Township 30 south, range 13 east..	do.....	12 00
Jan. 18, 1872	J. P. Dyer.....	Township 4 north, range 9 west..	do.....	50 00
Jan. 23, 1872	John Hawton.....	Township 6 south, range 8 west..	San Bernardino	10 00
Jan. 23, 1872	Thomas M. Pursell.....	Township 6 south, range 8 west..	do.....	20 00
Feb. 5, 1872	William McKaig.....	Township 33 north, range 6 west..	Mount Diablo..	50 00
Feb. 6, 1872	P. E. Wicks.....	Township 7 north, range 6 west..	do.....	10 00
Feb. 6, 1872	P. E. Wicks.....	Township 8 north, range 6 west..	do.....	20 00
Feb. 13, 1872	John Woodard.....	Township 12 north, range 7 east..	do.....	30 00
Feb. 21, 1872	A. Skaggs.....	Township 10 north, range 11 west..	do.....	50 00
Feb. 28, 1872	David Urmsted.....	Township 1 south, range 13 west..	San Bernardino	25 00
Feb. 28, 1872	Horatio S. Pareels.....	Township 1 south, range 13 west..	do.....	25 00
Mar. 1, 1872	J. M. Anderson.....	Township 10 north, range 11 east..	Mount Diablo..	30 00
Mar. 8, 1872	R. S. Baker.....	Township 3 north, range 17 west..	San Bernardino	65 00
Mar. 15, 1872	Charles Frederiek.....	Township 15 south, range 6 east..	Mount Diablo..	25 00
Mar. 15, 1872	Frank Hart.....	Township 15 south, range 6 east..	do.....	25 00
Mar. 20, 1872	T. J. Tucker.....	Township 7 north, range 4 west..	do.....	20 00
Mar. 20, 1872	H. C. Benson.....	Township 1 north, range 1 west..	do.....	20 00
Mar. 22, 1872	J. M. Pleasants.....	Township 7 north, range 2 west..	do.....	20 00
Mar. 29, 1872	F. R. Cordosa.....	Township 29 south, range 19 east..	do.....	50 00
Mar. 30, 1872	Town trustees Yreka.....	Town site of Yreka, in township 45 north, range 7 west.	do.....	50 00
April 12, 1872	Inhabitants of Rough and Ready.	Town site of Rough and Ready, in township 42 north, range 9 west.	do.....	50 00
April 15, 1872	Richard H. Gilman.....	Township 9 north, range 11 west..	do.....	20 00
April 19, 1872	James T. Gardner.....	Township 14 south, range 25 east..	do.....	60 00
April 23, 1872	Benjamin Bushell.....	Township 17 south, range 6 east..	do.....	20 00



## O.—Statement of special individual deposits, &amp;c.—Continued.

Date of deposit.	Name of depositor.	Location of survey.	Meridian.	Amount of deposit.
May 6, 1872	Erastus Wagner.....	Township 31 north, range 1 west	Mount Diablo	\$25 00
May 13, 1872	George A. Nourse.....	Township 1 north, range 6 west, Wood Island.	do.....	20 00
May 15, 1872	Michael Manning.....	Township 13 north, range 10 west	do.....	15 00
May 15, 1872	Thomas Manning.....	Township 13 north, range 10 west	do.....	15 00
May 16, 1872	Espey & McNab.....	Township 13 north, range 12 west	do.....	100 00
June 3, 1872	Robert Martin.....	Township 16 south, range 1 west	do.....	32 50
June 3, 1872	John Martin.....	Township 16 south, range 1 west	do.....	32 50
June 3, 1872	George A. Nourse.....	Township 19 south, range 5 east	do.....	50 00
June 4, 1872	Francis M. Kibler.....	Township 20 south, range 27 east	do.....	50 00
June 6, 1872	Frank B. Tully.....	Township 18 south, range 9 east	do.....	50 00
June 6, 1872	Nat. C. Tully.....	Township 18 south, range 9 east	do.....	50 00
June 8, 1872	John Taylor.....	Township 33 north, range 8 west	do.....	10 00
June 8, 1872	Olney Phillips.....	Township 33 north, range 8 west	do.....	20 00
June 8, 1872	Christian Frick.....	Township 33 north, range 8 west	do.....	20 00
June 8, 1872	J. F. Hadley.....	Township 33 north, range 8 west	do.....	20 00
June 8, 1872	M. W. Lowden.....	Township 33 north, range 9 west	do.....	10 00
June 8, 1872	John F. Wood.....	Township 33 north, range 9 west	do.....	20 00
June 8, 1872	George W. Wood.....	Township 33 north, range 9 west	do.....	20 00
June 18, 1872	John Welch.....	Township 23 south, range 16 east	do.....	100 00
June 24, 1872	J. P. Brandt.....	Township 10 north, range 5 west	do.....	15 00
June 28, 1872	Peter Anderson.....	Township 5 north, range 1 east	Humboldt	6 25
June 28, 1872	John J. Juhl.....	Township 5 north, range 1 east	do.....	6 25
June 28, 1872	G. Swanson.....	Township 5 north, range 1 east	do.....	6 25
June 28, 1872	Amos Foltz.....	Township 5 north, range 1 east	do.....	6 25
June 28, 1872	R. B. Turner.....	Township 26 south, range 16 east	Mount Diablo	25 00
June 28, 1872	B. F. Nosker.....	Township 26 south, range 16 east	do.....	25 00
June 28, 1872	William C. Taylor.....	Township 26 south, range 16 east	do.....	25 00
June 28, 1872	Henry Miller.....	Township 26 south, range 16 east	do.....	25 00
Total amount deposited for office work on public-land surveys.....				3,520 43

## RECAPITULATION.

Amount deposited for office work on mining surveys.....	\$4,210 00
Amount deposited for office work on public land surveys.....	3,520 43
Total amount deposited during the year.....	7,730 43

J. R. HARDENBERGH,  
United States Surveyor General for California.

## P.—Statement of the special deposit account for the fiscal year 1871-'72.

DR.			CR.		
1871.			1871.		
Aug. 15	To amount of deposit by Peter Gardner, agent, withdrawn.	\$65 00	June 30	By balance on hand.....	\$5,604 23
1872.			1872.		
June 30	To amount drawn for salaries of clerks and draughtsmen, as per Exhibit N.	9,279 55	June 30	By amount deposited during the fiscal year 1871-'72, as per Exhibit O.	7,730 43
July 1	To balance on hand.....	3,990 11			
	Total.....	13,334 66		Total.....	13,334 66
			July 1	By balance on hand.....	3,990 11

J. R. HARDENBERGH,  
United States Surveyor General for California.



Q.—*Estimate for the surveying service in the district of California for the fiscal year ending June 30, 1874.*

For surveying extensions of meridians, standard parallels, township exteriors and subdivision lines.....	\$100,000
For rent of office, stationery, fuel, wages of messenger, draughting instruments, and other incidental expenses.....	7,000
For compensation of surveyor general .....	3,000
For compensation of clerks and draughtsmen in the office of the surveyor general .....	26,000
	<u>136,000</u>

J. R. HARDENBERGH,  
*United States Surveyor General for California.*

### O.—*Report of the surveyor general of Oregon.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Eugene City, Oregon, September 9, 1872.*

SIR: I herewith transmit the following tabular statements showing the business of this office for the fiscal year ending June 30, 1872:

- A. Shows contracts acted upon during the fiscal year ending June 30, 1872.
- B. Original plats of public surveys and copies transmitted during the fiscal year ending June 30, 1872.
- C. Townships surveyed since June 30, 1871, with area of public lands.
- D. Estimate of surveying and office expenses for fiscal year ending June 30, 1874.
- E. Salaries paid surveyor general and clerks for fiscal year ending June 30, 1872.
- F. Statement of incidental expenses for fiscal year ending June 30, 1872.

The diagram map of this district will be completed and forwarded in time to reach your office by the 1st day of November next.

You will find indicated upon this diagram the surveys under contract, also the proposed surveys, for the fiscal year ending June 30, 1874.

In all this work I have carefully studied the wants of settlers upon the public domain, and also the claims of the various enterprises of a public character to aid which Government has given liberal grants of land.

The proposed surveys embrace nearly all the settlements on unsurveyed lands. Yet in a very short time the rapidly advancing settlements will extend beyond these limits. I cannot urge in too strong terms the necessity of having the public surveys extended in advance of settlements. This is especially desirable along the line of the several military roads and railroads.

The want of these surveys greatly retards settlements along these several lines, for the reason that a majority of settlers are men of limited means who desire the benefit of the homestead law.

They cannot well afford to spend several years improving a farm to find, when the public surveys are extended, that all their labor has been expended improving lands the property of some corporation.

Again, good faith on the part of the Government toward these several corporations having these enterprises in charge requires the early completion of the public surveys within their respective limits, so that the lands may be made available to the companies for the purposes intended. While I regard the policy of the Government, of giving a portion of the public domain in aid of important internal improvements, under proper restrictions, a good one, calculated to aid in the development of a new and sparsely settled country, I also deem it the duty of the Government to extend the surveys in advance of settlement for the protection of all parties. I would especially urge the appropriation named in table of estimates at increased rates for surveys west of the Cascade Mountains. None but those who have made the experiment can understand how difficult is the work of extending these surveys; the interminable undergrowth and the immense fallen trees make it exceedingly difficult to progress.

Nevertheless these lands are valuable for the timber, and much of it for agriculture, and faster than the extension of the public surveys settlers are endeavoring to make for themselves homes.

#### SWAMP LANDS.

During the fiscal year ending June 30, 1873, it will be incumbent on this office to give some attention to the selections of swamp and overflowed lands in this State, the State authorities having, pursuant to an act of the legislature, approved October 26, 1870,



taken steps to secure the benefit of an act of Congress entitled "An act to extend the provisions of an act to enable the State of Arkansas and other States to reclaim the swamp and overflowed lands within their limits to Minnesota and Oregon, and for other purposes," approved September 12, 1860. Extensive locations and selections have been made by the State authorities. No action has been had in this office as yet. The first list of selections, amounting in the aggregate to an area of one hundred and twenty-six thousand six hundred and thirty-six and nineteen one-hundredths acres, was filed in this office September 2, 1872.

#### RAILROADS.

The Oregon and California Railroad, to extend from Portland south to the State line, to connect with the California and Oregon from Sacramento City, California, is now completed, and in successful operation from Portland to Oakland, a distance of one hundred and eighty-one miles, and it is expected to have it completed to Roseburg, a distance of eighteen miles more, by the middle of November next.

To the early completion of this enterprise the people of Southern Oregon are looking with considerable interest, for the reason that it will give quick and certain communication with commercial centers. As that people are now situated, their only means of transportation is by wagons over difficult mountains, a distance of nearly one hundred miles, the road being almost impassable, except during the dry season. The Oregon Central Railroad is nearly completed to Saint Joseph, on the Yamhill, and will be in running order by the 1st of October next, by way of Hillsborough and Cornelius, in Washington County, a distance of forty-three miles. It is in contemplation to extend this road up the west side of the Willamette River, to connect with the Oregon and California road at Junction City, in Lane County; also to build a branch road from near Hillsborough to Astoria. After the completion of these already under way and making connection with the Northern Pacific Railroad, Oregon will be very well provided for in the way of railroad connections, with one exception, a line connecting the Columbia River with the Union Pacific, at or near the junction of the Union Pacific Railroad with the Central Pacific. This is in contemplation by the company recently organized under the name of the Portland, Dalles and Salt Lake Railroad Company. This enterprise, if carried out to completion, would meet a want long felt and very much needed by the settlers in the northern and eastern portions of our State and Idaho.

#### MINING INTERESTS.

The mining interests of Oregon are still of considerable importance. On the waters of John Day, Powder, and Burnt Rivers rich placer gold mines are being worked with profitable results. Quartz lodes are also attracting some attention; recently a lode of copper ore has been discovered in Union County, which prospects very rich.

For a number of years it has been known that gold existed in considerable quantities among the black sands along the ocean beach south of Coos Bay, and miners have been working them more or less; but recently further discoveries have been made near Port Orford. From present indications these mines are destined to become quite valuable, the principal drawback being the want of water for hydraulic purposes.

#### COAL.

Since my last annual report coal has been discovered in the Calapooia Mountains, within about eight miles of the Oregon and California Railroad; also on the head waters of the Nehalem River, about eighteen miles northwest of Hillsborough, in Washington County, near the line of the proposed Astoria branch of the Oregon Central Railroad. It will require further exploration to determine whether coal exists in sufficient quantities to warrant the necessary outlay to work the mines successfully.

#### MANUFACTURES.

The manufacturing interests of the State are being developed as rapidly as the wants of the country warrant. The lumber trade is quite important, being confined principally to the Columbia River and the harbors along the coast, Coos and Yaquina Bays being the more important points. The principal kinds of lumber are fir and cedar. Sufficient hard wood, such as ash, maple, and alder, is made to meet the local demand for building purposes.

An extensive establishment for manufacturing all kinds of farming implements will soon be completed at Salem, good water power having been obtained. The iron foundry at Oswego, seven miles above Portland, on the Willamette, has been recently purchased by an eastern company, and is being enlarged and otherwise improved, with a view of manufacturing on an extensive scale, from the rich beds of ore near by, iron of every variety suited to this market.



## OFFICE WORK.

You will observe from the tabular statements herewith returned that the office work for the past year has greatly exceeded any former year for the last ten years, while the appropriation for the last fiscal year only provided for a chief clerk, one draughtsman, and one transcribing clerk for ten months in the year. I found the force thus provided quite inadequate to the increased work. The amount of field work, including the survey of Indian reservations in Oregon, amounted to eighty-seven thousand dollars. This, in connection with the mineral surveys, increased the office work more than three times over former years.

To meet this increased work I found it necessary to employ additional help, which I did at my own expense, for the space of five months, at the usual rates, amounting to five hundred dollars. I could not well afford to meet this expense, yet I preferred to do it rather than to permit the work to fall so far behind. With this additional help, however, the work is still considerably behind in the office.

In this connection I desire to suggest the necessity of having the original field notes of the survey of the donation claims in Oregon copied into substantial record books in a neat and systematic manner, properly indexed, for the use of this office, and to better preserve the originals; also the original field notes of the public surveys.

I deem this important, in view of the fact that these originals are often written upon poor paper, in a very indifferent hand, and with poor ink, sometimes upon loose leaves, or at least but poorly bound. It is often necessary to refer to these, and each time they are handled they are more or less damaged, and again it is impossible to arrange and keep the notes as now written in such a way as to be referred to readily. By pursuing the plan suggested above, as fast as the originals are carefully copied and compared they can be filed away in a manner best calculated to preserve them.

For the purpose of carrying out the above suggestion, I would recommend, in addition to the amount named in my tabular statement marked "D," for clerk hire, the sum of thirty-six hundred dollars, making three additional transcribing clerks.

Very respectfully, your obedient servant,

W. H. ODELL,  
*Surveyor General.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington, D. C.*



A.—Surveying contracts acted upon during the fiscal year ending June 30, 1872.

Contracts.		Contractors.	Location and description of lines,	Estimated amount surveyed.					Gross amount	Remarks.
No.	Date.			No. of miles.	Interior on standards.	Standard parallels.	Exteriors.	Subdivisions.		
					<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>		
143	Dec. 29, 1870	John H. McClung and William B. Pengra.	Exteriors of township 17 south, range 1 east; subdivision of fractional township 16 south, ranges 1 and 2 west; township 17 south, range 1 west; exterior and subdivisional lines in townships 30, 29, 28, 27, and 25 south, range 14 east.	-----	-----	-----	97 70 95	468 7 17	\$6,092 64	Contract closed; account transmitted and reported for payment.
144	Apr. 12, 1871	Jesse Applegate, Daniel W. Applegate and M. L. McCall.	Exterior and subdivision of township 38 south, ranges 4, 5, and 6 east; subdivisions of township 37 south, range 4 east; connection on State line, township 41 south, ranges 2 and 7 east; exteriors of township 40 south, ranges 11, 12, 13, and 14 east; exteriors of township 41 south, ranges 12, 13, and 14 east; subdivisions of township 40 south, ranges 11 and 12 east; connection on State line of township 41 south, ranges 8, 10, and 11 east.	387	-----	-----	61 41 67	314 72 25	3,717 43	Contract closed; account transmitted and reported for payment.
145	Apr. 23, 1871	Zenas F. Moody...	Exteriors of township 1 north, ranges 33, 34, and 35 east; exteriors of township 2 north, ranges 33 and 34 east; exteriors of township 3 north, range 34 east; subdivisions of township 1 north, ranges 33 and 34 east; township 2 north, ranges 33 and 34 east; township 3 north, ranges 34, 35, and 36 east.	390	-----	-----	65 77 65	173 5 16	4,000 00	Contract closed; account transmitted and reported for payment.
146	May 2, 1871	George Mercer....	Standard parallel from southwest corner of township 34 south, range 9 east; exteriors of township 34 south, ranges 6 and 7 east; exteriors of township 33 south, ranges 6 and 7 east; exteriors of township 32 south, range 6 east; subdivisions of townships 33 and 34 south, ranges 6 and 7 east; 32 south, range 6 east.	374	-----	11 58 50	12 0 00	186 64 00*	3,121 17	Contract closed; account transmitted and paid.
147	May 4, 1871	T. B. Handley.....	Exteriors of township 8 south, ranges 12 and 13 east; exteriors of township 7 south, ranges 12 and 13 east; exteriors of townships 5 and 6 south, ranges 12 and 13 east; subdivisions of township 7 south, range 13 east.	176	-----	-----	90 4 45	92 8 40	2,000 00	Contract closed; account transmitted and paid.
148	May 17, 1871	John S. Kincaid...	Exteriors of townships 13, 14, and 15 south, ranges 40, 41, and 42 east; subdivisions of townships 13, 14, and 15 south, ranges 40 and 41 east.	468	-----	-----	107 74 59	370 0 45	4,995 24	Contract closed; account transmitted and paid.



## A.—Surveying contracts acted upon during the fiscal year ending June 30, 1872—Continued.

Contracts.		Contractors.	Location and description of lines.	Estimated amount surveyed.					Gross am't.	Remarks.
No.	Date.			No. of miles.	Interior on standards.	Standard parallels.	Exteriors.	Subdivisions.		
					<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>		
149	May 18, 1871	James H. Evans ..	Standard parallel between townships 17 and 18 south, commencing at the southeast corner of township 17 south, range 17 east; thence east through ranges 19, 20, 21, and 22 east; exteriors of townships 16 and 17 south, range 18 east; exteriors and subdivision of townships 14, 15, 16, and 17 south, range 19 east; subdivisions of townships 16 and 17 south, range 18 east.	456	.....	36 0 00	59 70 08	359 17 81	\$4,850 73	Contract closed; account transmitted and paid.
150	May 20, 1871	J. M. Dick .....	Exteriors of townships 15, 16, & 17 south, ranges 20, 21, and 22 east; subdivisions of townships 16 and 17 south, ranges 20, 21, and 22 east.	.....	2 3 90	18 0 00	89 39 84	340 62 93	4,719 23	Contract closed; account transmitted and paid.
151	May 23, 1871	A. R. Flint and L. L. Williams.	Exteriors and subdivisions of townships 25, 26, 27, and 28 south, range 12 west; subdivisions of fractional township 29 south, ranges 3 and 4 west; subdivisions of township 28 south, ranges 4 and 5 west; subdivisions of fractional township 26 south, range 3 west; subdivision of fractional townships 26, 27, and 28 south, range 13 west.	314	.....	.....	8 52 03	141 65 41	2,403 26	Contract closed; account transmitted and paid.
152	June 3, 1871	William H. Byars.	Subdivisions of fractional township 22 south, ranges 5, 6, and 7 west; subdivisions of fractional township 24 south, ranges 3 and 6 west; subdivisions of fractional township 25 south, ranges 5 and 6 west; subdivisions of townships 27 and 28 south, range 8 west; subdivisions of fractional township 29 south, ranges 6 and 7 west; subdivisions of fractional township 32 south, ranges 4 and 5 west; subdivisions of fractional township 3 south, range 6 west.	250	.....	.....	27 0 50	175 10 20	3,234 14	Contract closed; account transmitted and paid.
153	May 24, 1871	William E. Smith .	Standard parallel between townships 4 and 5 north, west through ranges 4, 5, 6, 7, and 8; exteriors of townships 3 and 4 north, ranges 3 and 4 west; subdivisions of townships 3 and 4 north, range 3 west; subdivisions of township 3 north, range 4 west.	.....	.....	.....	.....	.....	.....	.....
154	June 6, 1871	George Williams and George S. Pershin.	Exteriors and subdivisions of township 1 south, ranges 28, 29, and 30 east; exteriors of subdivisions of township 2 south, ranges 28 and 29 east; exteriors of township 2 south, range 30 east.	360	.....	.....	72 4 35	300 22 26	3,867 43	Contract closed; account transmitted and paid.







## A.—Surveying contracts acted upon during the fiscal year ending June 30, 1872—Continued.

Contracts.		Contractors.	Location and description of lines.	Estimated amount surveyed.					Gross amount	Remarks.
No.	Date.			No. of miles.	Interior on standards.	Standard parallels.	Exteriors.	Subdivisions.		
					<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>	<i>M. ch. lk.</i>		
164	Sept. 7, 1871	T. B. Handley.....	The north and south boundaries of the Warm Springs Indian reservation, or so much thereof as may be ordered in writing by the agent upon said reservation; also, exteriors and subdivisions of such townships as may be ordered in writing by said agent; also, subdivide into twenty-acre lots such sections as may be so ordered by said agent.	.....	.....	.....	.....	.....	.....	
165	Oct. 4, 1871	Zenas F. Moody....	Subdivisional lines of fractional township 3 north, ranges 34 and 35 east; also to subdivide into twenty-acre lots such sections or parts of sections as may be designated by the Hon. A. B. McEacham, superintendent of Indian affairs, or by the agent upon the Unatilla Indian reservation.	.....	.....	.....	38 39 30	364 61 16	.....	Contract closed; account transmitted.
166	Jan. 10, 1872	John W. Meldrum.	Extend the first standard parallel southwest to the Pacific Ocean, commencing at the southwest corner of township 5 south, range 8 west; also, survey the exteriors and subdivisions of such townships and fractional townships, together with the subdivision, into twenty-acre lots, of such sections and parts of sections upon the Nestucca and Salmon Rivers, upon the Coast Indian reservation, as may be designated by the superintendent of Indian affairs for the State of Oregon or by the agent upon the Grand Round Indian reservation; also to survey the north boundary of the Coast Indian reservation.	.....	.....	.....	.....	.....	.....	
167	June 15, 1872	George Mercer....	Subdivide into twenty-acre lots such sections and parts of sections in township 36 south, ranges 10, 11, and 12 east, as may be designated in writing by the honorable superintendent of Indian affairs for the State of Oregon or the agent upon the Klamath Indian reservation.	.....	.....	.....	.....	.....	.....	

\* Boundary lines.



*B.—Statement of original plats of public surveys and copies transmitted since June 30, 1871.*

Lines.	Contractors.	Contract.		Plats made.			
		Number.	Date.	Original.	Commissioner's.	Register's.	Total.
Exterior and subdivision Ts. 32, 33 S., R. 2 E.	Turner & Howard	142	Sept. 9, 1870				
Exterior and subdivision Ts. 41 S., Rs. 3, 4 E.	do	142	do	5	5	4	14
Subdivisions of T. 39 S., R. 1 E.	do	142	do	1	1	1	3
Exterior T. 14 S., R. 1 E.	James A. Warner	135	Aug. 15, 1870				
Exterior T. 13 S., R. 2 E.	do	135	do	1	1		2
Subdivisions T. 14 S., Rs. 1, 2 E.	do	135	do	2	2	2	6
Subdivisions T. 13 S., Rs. 2, 3 E.	do	135	do	2	2	2	6
Third standard parallel through R. 2 E., and 3 miles in 3 E.	do	135	do	1	1		2
Exteriors T. 18 S., R. 13 E.	George W. Newman.	141	Aug. 31, 1870				
Exteriors T. 17 S., Rs. 11, 12, 13 E.	do	141	do				
Exteriors T. 16 S., Rs. 10, 11, 12 E.	do	141	do	1	1		2
Subdivisions T. 18 S., R. 13 E.	do	141	do	1	1	1	3
Subdivisions T. 17 S., Rs. 11, 12, 13 E.	do	141	do	3	3	3	9
Subdivisions T. 16 S., Rs. 10, 11, 12 E.	do	141	do	3	3	3	9
Exterior T. 17 S., R. 1 E.	McClung & Pengra.	143	Dec. 29, 1870				
Exterior Ts. 28, 29 S., Rs. 13, 14 E.	do	143	do				
Exterior T. 16 S., Rs. 2, 4, 5 E.	do	143	do				
Exterior T. 30 S., R. 14 E.	do	143	do	2	2		4
Subdivisions T. 17 S., R. 1 W.	do	143	do	1	1	1	3
Subdivisions Ts. 16, 17 S., R. 4 E.	do	143	do	3	3		6
Subdivisions T. 16 S., Rs. 2, 3, 5, 6 E.	do	143	do	2	2	2	6
Subdivisions Ts. 28, 29 S., Rs. 13, 14, 15 E.	do	143	do	4	4	4	12
Subdivisions T. 30 S., R. 14 E.	do	143	do	6	6	6	18
Subdivisions T. 16 S., Rs. 1, 2 W.	do	143	do	1	1	1	3
Exterior T. 28 S., R. 14 E.	do	143	do	2	2		4
Exterior T. 4 S., R. 15 E.	John B. David	140	Aug. 31, 1870				
Exterior Ts. 3, 4, 6 S., R. 16 E.	do	140	do				
Subdivision T. 2 S., R. 14 E.	do	140	do	1	1	1	3
Subdivision T. 4 S., R. 15 E.	do	140	do	1	1	1	3
Subdivision Ts. 3, 4, 6 S., R. 16 E.	do	140	do	1	1	1	3
Subdivision Ts. 3, 4 S., R. 17 E.	do	140	do	3	3	2	8
Exteriors T. 1, 2 N., R. 33 E.	Zenas F. Moody.	145	April 23, 1871				
Exteriors T. 1, 2 N., R. 34 E.	do	145	do				
Exteriors T. 1 N., R. 35 E.	do	145	do	1	1		2
Subdivision Ts. 1, 2 N., Rs. 33, 34 E.	do	145	do	4	4	4	12
Exterior boundary Umatilla Indian reservation.	do	145	do	1	1		2
Exterior Ts. 5, 6 S., R. 7 W.	David P. Thompson.	159	July 8, 1871				
Exterior boundary Grand Round reservation.	do	159	do	1	1		2
Subdivision Ts. 5, 6 S., Rs. 7, 8 W.	do	159	do	4	4	4	12
Exteriors T. 37 S., R. 5 E.	Applegate & McCall.	144	April 12, 1871				
Exteriors T. 38 S., R. 6 E.	do	144	do				
Exteriors T. 40 S., Rs. 11, 12, 13, 14 E.	do	144	do				
Subdivision T. 37 S., R. 5 E.	do	144	do	2	2		4
Subdivision T. 38 S., Rs. 4, 5, 6 E.	do	144	do	1	1	1	3
Subdivision T. 40 S., Rs. 11, 12 E.	do	144	do	3	3	2	8
Subdivision T. 41 S., Rs. 2, 7, 8, 10, 11, 12 E.	do	144	do	6	6	6	18
Exterior T. 34 S., R. 7 E.	George Mercer.	146	May 2, 1871				
Exterior boundary Klamath Indian reservation.	do	146	do	1	1		2
Seventh standard parallel between Ts. 34, 35 S., through Rs. 7, 8 E.	do	146	do	1	1		



## B.—Statement of original plats of public surveys, &amp;c.—Continued.

Lines.	Contractors.	Contract.		Plats made.			
		Number.	Date.	Original.	Commissioner's.	Register's.	Total.
South boundary Siletz Indian reservation.	T. W. Davenport....	156	June 23, 1871	1	1	....	2
Subdivisions Ts. 9, 10 S., Rs. 9, 10 W.	do.....	156	do.....	4	4	4	12
Standard parallel between Ts. 17, 18 S., through Rs. 18, 19, 20, 21, 22 E.	James H. Evans....	149	May 18, 1871	1	1	....	2
Standard parallel between Ts. 15, 16 S., through R. 19 E.	do.....	149	do.....				
Exterior Ts. 14, 15, 16, 17 S., R. 19 E.	do.....	149	do.....				
Exterior Ts. 16, 17 S., R. 18 E.	do.....	149	do.....	1	1	....	2
Subdivision Ts. 14, 15, 16, 17 S., R. 19 E.	do.....	149	do.....	4	4	4	12
Subdivision Ts. 16, 17 S., R. 18 E.	do.....	149	do.....	2	2	2	6
Exterior T. 25 S., Rs. 11, 12 W.	Flint & Williams....	151	May 23, 1871	1	1	....	2
Subdivision T. 25 S., Rs. 11, 12 W.	do.....	151	do.....	2	2	2	6
Subdivision Ts. 26, 27 S., R. 3 W.	do.....	151	do.....	2	2	2	6
Subdivision T. 28 S., R. 5 W.	do.....	151	do.....	1	1	1	3
Subdivision Ts. 27, 28 S., R. 13 W.	do.....	151	do.....	2	2	2	6
Exteriors T. 1 S., Rs. 15, 16 E.	David P. Thompson..	158	July 1, 1871				
Exteriors Ts. 7, 8 S., R. 16 E.	do.....	158	do.....				
Exteriors Ts. 10, 11, 12 S., R. 18 E.	do.....	158	do.....	1	1	....	2
Subdivision Ts. 1, 2, 7, 8 S., R. 16 E.	do.....	158	do.....	4	4	4	12
Subdivision T. 1 S., R. 15 E.	do.....	158	do.....	1	1	1	3
Subdivision Ts. 10, 11, 12 S., R. 18 E.	do.....	158	do.....	3	3	3	9
Exteriors Ts. 1, 2 S., Rs. 28, 29 E.	Williams & Pershin..	154	June 6, 1871				
Exteriors Ts. 1, 2 S., R. 30 E.	do.....	154	do.....	1	1	....	2
Subdivision Ts. 1, 2 S., Rs. 28, 29 E.	do.....	154	do.....	4	4	4	12
Subdivision T. 1 S., R. 30 E.	do.....	154	do.....	1	1	1	3
Interior subdivision Ts. 9, 10 S., Rs. 9, 10 W.	T. W. Davenport....	162	Sept. 7, 1871	4	4	4	12
Exterior T. 24 S., R. 3 W.	W. H. Byars.....	152	June 3, 1871				
Exterior T. 25 S., R. 4 W.	do.....	152	do.....				
Exterior T. 31 S., Rs. 3, 4 W.	do.....	152	do.....				
Exterior T. 32 S., R. 3 W.	do.....	152	do.....	1	1	....	2
Subdivision Ts. 24, 32 S., R. 3 W.	do.....	152	do.....	2	2	2	6
Subdivision Ts. 25, 32 S., R. 4 W.	do.....	152	do.....	2	2	2	6
Subdivision T. 31 S., Rs. 3, 4 W.	do.....	152	do.....	2	2	2	6
Subdivision T. 32 S., R. 3 W.	do.....	152	do.....	1	1	1	3
Subdivision Ts. 25, 32 S., R. 5 W.	do.....	152	do.....	2	2	2	6
Subdivision T. 22 S., Rs. 6, 7 W.	do.....	152	do.....	2	2	2	6
Subdivision T. 21 S., R. 6 W.	do.....	152	do.....	1	1	1	3
Exteriors Ts. 13, 14, 15 S., R. 12 E.	Walker & Perkins..	161	July 24, 1871	1	1	....	2
Subdivision Ts. 13, 14, 15 S., R. 12 E.	do.....	161	do.....	3	3	3	9
Exteriors Ts. 15, 16, 17 S., Rs. 20, 21, 22 E.	J. M. Dick.....	150	May 20, 1871	1	1	....	2
Subdivisions Ts. 16, 17 S., Rs. 20, 21, 22 E.	do.....	150	do.....	6	6	6	18
Standard parallel between Ts. 15, 16 S., through Rs. 20, 21, 22 E.	do.....	150	do.....	1	1	....	2
Exteriors Ts. 3, 4 N., Rs. 34, 35 E.	Zenas F. Moody....	164	Oct. 4, 1871				
Exteriors T. 1 N., R. 32 E.	do.....	164	do.....				
Exteriors T. 1 S., R. 32 E.	do.....	164	do.....	1	1	....	2
Subdivision Ts. 3, 4 N., Rs. 34, 35 E.	do.....	164	do.....	4	4	4	12
Subdivision Ts. 1, 2 N., R. 32 E.	do.....	164	do.....	2	2	2	6
Subdivision Ts. 1, 3 N., R. 33 E.	do.....	164	do.....	2	2	2	6
Subdivision T. 2 N., Rs. 33, 34 E.	do.....	164	do.....	2	2	2	6
Subdivision T. 1 S., R. 32 E.	do.....	164	do.....	1	1	1	3
Subdivision T. 1 S., R. 32 E.	do.....	164	do.....	1	1	1	3
Subdivision T. 1 N., R. 32 E.	do.....	164	do.....	1	1	1	3
Subdivision T. 2 N., Rs. 32, 34 E.	do.....	164	do.....	2	2	2	6
Subdivision T. 3 N., Rs. 33, 34, 35 E.	do.....	164	do.....	3	3	3	9
Subdivision T. 4 N., Rs. 34, 35 E.	do.....	164	do.....	2	2	2	6
Total.....							543



## C.—Townships surveyed since June 30, 1871, with area of public lands.

Number.	Description.		Area, (acres.)	By whom surveyed.
	Township.	Range.		
1	32 south	2 east	11,788.17	Turner & Howard.
2	33 south	2 east	6,879.71	Do.
3	41 south	3 east	4,251.57	Do.
4	41 south	4 east	7,895.78	Do.
5	39 south	1 east	3,200.00	Do.
6	14 south	1 east	18,247.37	James H. Warner.
7	14 south	2 east	5,111.65	Do.
8	13 south	2 east	3,836.48	Do.
9	13 south	3 east	1,921.12	Do.
10	17 south	11 east	23,188.54	George W. Newman.
11	17 south	12 east	22,927.72	Do.
12	16 south	12 east	20,613.66	Do.
13	16 south	11 east	21,483.64	Do.
14	16 south	10 east	12,579.24	Do.
15	17 south	3 east	658.61	McClung & Pengra.
16	17 south	1 east	2,369.43	Do.
17	17 south	2 east	20.11	Do.
18	16 south	4 east	1,267.85	Do.
19	17 south	4 east	16.20	Do.
20	16 south	2 east	4,086.38	Do.
21	16 south	3 east	373.88	Do.
22	16 south	5 east	3,116.49	Do.
23	16 south	6 east	384.23	Do.
24	37 south	5 east	9,368.56	Applegate & McCall.
25	38 south	4 east	16,961.13	Do.
26	38 south	5 east	9,395.53	Do.
27	38 south	6 east	5,440.00	Do.
28	40 south	11 east	23,951.21	Do.
29	40 south	12 east	18,937.70	Do.
30	41 south	2 east	8,875.02	Do.
31	41 south	7 east	9,133.66	Do.
32	41 south	8 east	3,917.62	Do.
33	41 south	10 east	9,258.12	Do.
34	41 south	11 east	6,489.70	Do.
35	41 south	12 east	9,876.13	Do.
36	6 south	12 east	6,257.51	T. B. Handley.
37	7 south	12 east	23,107.46	Do.
38	9 south	12 east	5,441.28	Do.
39	13 south	12 east	6,731.86	Walker & Perkins.
40	14 south	12 east	23,273.52	Do.
41	15 south	12 east	23,261.86	Do.
42	18 south	13 east	23,071.09	George W. Newman.
43	17 south	13 east	23,012.32	Do.
44	28 south	13 east	11,522.01	McClung & Pengra.
45	29 south	13 east	23,015.57	Do.
46	28 south	14 east	22,330.95	Do.
47	29 south	14 east	21,128.45	Do.
48	28 south	15 east	7,786.45	Do.
49	29 south	15 east	20,661.26	Do.
50	30 south	14 east	23,059.38	Do.
51	2 south	14 east	23,021.15	John B. David.
52	4 south	15 east	23,016.12	Do.
53	3 south	16 east	23,011.27	Do.
54	4 south	16 east	23,119.03	Do.
55	6 south	16 east	23,217.71	Do.
56	3 south	17 east	22,776.77	Do.
57	4 south	17 east	22,742.71	Do.
58	14 south	19 east	22,946.47	J. H. Evans.
59	15 south	19 east	23,023.05	Do.
60	16 south	19 east	22,765.59	Do.
61	17 south	19 east	23,025.39	Do.
62	16 south	18 east	22,676.26	Do.
63	17 south	18 east	22,856.23	Do.
64	1 south	16 east	14,592.42	D. P. Thompson.
65	2 south	16 east	15,988.47	Do.
66	7 south	16 east	22,944.24	Do.
67	8 south	16 east	22,992.01	Do.
68	1 south	15 east	16,140.18	Do.
69	10 south	18 east	23,000.32	Do.
70	11 south	18 east	23,025.06	Do.
71	12 south	18 east	21,213.43	Do.
72	16 south	20 east	22,362.84	J. M. Dick.
73	17 south	20 east	23,041.48	Do.
74	16 south	21 east	15,583.73	Do.
75	17 south	21 east	23,031.47	Do.
76	16 south	22 east	21,948.27	Do.
77	17 south	22 east	23,015.56	Do.
78	13 south	40 east	23,026.01	J. S. Kincaid.



C.—Townships surveyed since June 30, 1871, &c.—Continued.

Number.	Description.		Area, (aeres.)	By whom surveyed.
	Township.	Range.		
79	14 south .....	40 east .....	23,033.91	J. S. Kincaid.
80	15 south .....	40 east .....	23,047.18	Do.
81	13 south .....	41 east .....	23,034.85	Do.
82	14 south .....	41 east .....	23,028.65	Do.
83	15 south .....	41 east .....	23,041.68	Do.
84	13 south .....	42 east .....	4,005.70	Do.
85	14 south .....	42 east .....	23,057.59	George H. Thurston
86	15 south .....	42 east .....	23,052.57	Do.
87	16 south .....	42 east .....	23,039.58	Do.
88	15 south .....	43 east .....	23,027.75	Do.
89	16 south .....	43 east .....	23,054.84	Do.
90	15 south .....	44 east .....	23,042.33	Do.
91	16 south .....	44 east .....	23,043.39	Do.
92	1 south .....	28 east .....	22,954.14	Williams & Pershin.
93	2 south .....	28 east .....	22,943.02	Do.
94	1 south .....	29 east .....	22,820.86	Do.
95	2 south .....	29 east .....	22,910.56	Do.
96	1 south .....	30 east .....	22,916.60	Do.
97	1 north .....	33 east .....	7,633.58	Z. F. Moody.
98	1 north .....	33 east .....	15,347.64	Do.
99	2 north .....	33 east .....	23,042.90	Do.
100	1 north .....	34 east .....	10,259.36	Do.
101	2 north .....	34 east .....	22,837.95	Do.
102	3 north .....	35 east .....	19,444.32	Do.
103	17 south .....	1 west .....	3,255.79	McClung & Pengra.
104	16 south .....	1 west .....	1,440.00	Do.
105	16 south .....	2 west .....	3,200.00	Do.
106	24 south .....	12 west .....	5,264.53	James Aiken.
107	28 south .....	14 west .....	10,987.85	Do.
108	26 south .....	13 west .....	11,632.37	Do.
109	27 south .....	13 west .....	13,658.68	Flint & Williams.
110	25 south .....	12 west .....	9,376.39	Do.
111	28 south .....	13 west .....	13,781.33	Do.
112	25 south .....	11 west .....	1,858.34	Do.
113	28 south .....	5 west .....	6,400.00	Do.
114	27 south .....	3 west .....	2,564.16	Do.
115	26 south .....	3 west .....	1,760.00	Do.
116	27 south .....	13 west .....	1,440.00	James Aiken.
117	32 south .....	3 west .....	8,646.19	W. H. Byars.
118	24 south .....	3 west .....	5,285.68	Do.
119	32 south .....	4 west .....	4,965.26	Do.
120	25 south .....	4 west .....	11,039.74	Do.
121	31 south .....	3 west .....	2,088.96	Do.
122	31 south .....	4 west .....	2,880.00	Do.
123	25 south .....	5 west .....	5,120.00	Do.
124	32 south .....	5 west .....	6,719.22	Do.
125	21 south .....	6 west .....	2,400.00	Do.
126	22 south .....	6 west .....	4,003.20	Do.
127	22 south .....	7 west .....	13,180.43	Do.
128	9 south .....	9 west .....	4,782.83	T. W. Davenport.
129	10 south .....	9 west .....	1,477.92	Do.
130	9 south .....	10 west .....	4,480.00	Do.
131	10 south .....	10 west .....	6,599.00	Do.
132	3 north .....	3 west .....	22,851.67	W. E. Smith.

Total acres south of the base line and east of the Willamette meridian.....	1,569,651.62
Total acres north of the base line and east of the Willamette meridian.....	98,615.75
Total acres south of the base line and west of the Willamette meridian.....	170,287.87
Total acres north of the base line and west of the Willamette meridian, in the State of Oregon.....	22,851.67
Total acres.....	1,861,406.91



## E.—Salaries paid surveyor general and clerks for fiscal year ending June 30, 1872.

Names.	Oecupation.	Nativity.	Term of office.	Amount paid.
W. H. Odell.....	Surveyor general ...	Indiana.....	July 1, 1871, to June 30, 1872 ..	\$2,500 00
A. W. Stowell.....	Chief clerk.....	do.....	July 1, 1871, to June 30, 1872 ..	1,600 00
George Stowell.....	Draughtsman.....	do.....	July 1, 1871, to June 30, 1872 ..	1,400 00
W. H. Haley.....	Transcribing clerk..	Kentucky....	July 1, 1871, to Nov. 30, 1871 ..	500 00
A. S. McClure.....	do.....	Ohio.....	Oct. 1, 1871, to Feb. 29, 1872 ...	500 00
Total.....	.....	.....	.....	6,500 00

## D.—Estimates for surveying and office expenses for the fiscal year ending June 30, 1872.

## OFFICE EXPENSES.

Salary of surveyor general.....	\$2,500
chief clerk.....	1,600
draughtsman.....	1,400
three transcribing clerks, at \$1,200 each.....	3,600
Incidental expenses, messengers, rent, &c.....	2,000
	<u>\$11,100</u>

## SURVEYING EXPENSES.

Surveying 60 miles standard parallels, at \$18 per mile.....	\$1,080
600 miles exteriors, at \$16 per mile.....	9,600
3,000 miles subdivisions, at \$16 per mile.....	48,000
90 miles standard parallels, at \$15 per mile.....	1,350
1,200 miles exteriors, at \$14 per mile.....	16,800
2,000 miles subdivisions, at \$12 per mile.....	24,000
	<u>100,830</u>

Total..... 111,930

## F.—Statement of incidental expenses for the fiscal year ending June 30, 1872.

	Third quarter, 1871:		
September 30, 1871...	A. V. Peters & Co., rent, &c.....	\$80 50	
September 30, 1871...	F. Dudley, messenger.....	150 00	
September 30, 1871...	A. S. Patterson, postage, box rent, &c.....	111 57	
September 30, 1871...	P. G. Lemley, wood.....	33 33	
			\$375 40
	Fourth quarter, 1871:		
December 31, 1871...	A. V. Peters & Co., rent, &c.....	76 75	
December 31, 1871...	F. Dudley, messenger.....	150 00	
December 31, 1871...	A. S. Patterson, postage and stationery.....	72 73	
December 31, 1871...	J. S. Kincaid, printing.....	27 00	
December 31, 1871...	B. F. Dorris, tin cases.....	9 75	
			336 23
	First quarter, 1872:		
March 31, 1872.....	A. V. Peters & Co., office rent, &c.....	76 25	
March 31, 1872.....	F. Dudley, messenger.....	150 00	
March 31, 1872.....	A. S. Patterson, postage and stationery.....	97 28	
March 31, 1872.....	B. F. Dorris, map cases.....	15 75	
March 31, 1872.....	W. H. Abrams, secretary.....	44 00	
			373 28
	Second quarter, 1872:		
June 30, 1872.....	A. V. Peters & Co., rent, &c.....	76 25	
June 30, 1872.....	F. Dudley, messenger.....	150 00	
June 30, 1872.....	A. S. Patterson, stationery, &c.....	255 00	
June 30, 1872.....	John Wand, map cases.....	18 00	
June 30, 1872.....	J. S. Kincaid, printing.....	16 00	
			515 25
	Total.....		1,600 16
	Unexpended balance.....		399 84
	Total.....		<u>2,000 00</u>



*P.—Report of the surveyor-general of Washington Territory.*

SURVEYOR GENERAL'S OFFICE,  
Olympia, Washington Territory, September 9, 1872.

SIR: Referring to your letter of instructions of June 17, 1872, I have the honor herewith to submit, in duplicate, a report of the surveying operations in this district for the year ending June 30, 1872, embracing tabular statements, as follows:

A. Showing the condition of contracts not closed at the date of the last annual report.

B. Showing the amount, character, and condition of public surveys in Washington Territory, contracted for under appropriation for the fiscal year ending June 30, 1872.

C. Showing the number of plats made and number of copies transmitted to the General Land Office and to the district land offices during the fiscal year just closed.

D. Showing the number of linear miles run, the rate per mile, and the total cost of surveys in Washington Territory during the fiscal year ending June 30, 1872.

E. Showing the number and designations of the townships, and the number of acres surveyed in Washington Territory during the past fiscal year, together with the total number of acres surveyed in the Territory.

F. Showing the amount and condition of appropriation and the amounts paid on contracts for surveys made up to the close of the fiscal year.

G. Showing the amount and condition of special deposits made for surveys of public lands in Washington Territory during the fiscal year ending June 30, 1872.

H. Showing account of appropriation for salary of surveyor general of Washington Territory for the fiscal year ending June 30, 1872.

I. Showing account of appropriation for compensation of clerks and draughtsman in the surveyor general's office during the past fiscal year.

J. Showing account of appropriation for office rent, stationery, fuel, pay of messenger, and incidental expenses of the surveyor general's office during the past fiscal year.

K.—Showing estimated amount required for the surveying service in the district of Washington Territory for the fiscal year ending June 30, 1874.

The progress of the surveying service in this district during the past year has been very satisfactory. By reference to the details of the foregoing statements, and comparing them with previous reports from this office, it will be observed that the work, during the past fiscal year, has largely exceeded that of any former period since the organization of the district. The area of public lands surveyed and made available to the homestead and pre-emption settler amounts to 1,232,878 acres, exceeding the area of the year previous by 841,619 acres, being an excess of more than three to one. The appropriation applicable to field work was only double that of the previous year; that for the office work being the same. In addition to these there has been deposited by private individuals the sum of \$2,978 dollars for field work, and \$370 for office work. The large amount of work executed both in the field and in the office is greatly attributable to the wise and justly discriminating skill of my predecessor in office, Hon. E. P. Ferry, in the awarding of contracts, the proper distribution of the surveys in needed localities, and in the various duties devolving upon him in his official capacity; and also in the promptness and dispatch with which the work has been prosecuted both in the field and office. Owing to the small appropriation for clerical service, forbidding the employment of assistants to meet the greatly increased office duties, an almost continual press of extra labor has been shared by the employés in the office, in order to carry forward, with promptness, its business to a successful completion at the close of the fiscal year. This result, I am gratified to report, has been attained. Due economy has been employed in the incidental expenditures of the office, and the aggregate disbursements confined within the amount of appropriation by Congress for that purpose.

The public surveys have been extended in such localities in this Territory as it was believed would accommodate the immediate wants of the largest number of settlers, and with reference to demands and exigencies arising from railroad interests, and the present and prospective growth in population in every part of the Territory.

In proportion to the number of miles actually surveyed in the field, there have been less of meridian, standard, and exterior township lines than ordinarily, and, as a consequence, a larger area of the public domain sectionized, thus not only affording increased advantages and accommodations to the settlers in availing themselves of the homestead and pre-emption privileges, but in enabling the Northern Pacific Railroad Company to assume immediate control of the lands falling within the purview of their grant, and to protect the valuable lumbering forests from encroachments.

#### INDIAN RESERVATIONS.

I would recommend that a portion of the principal reservations, those that have large tribes of Indians settled upon them, be surveyed into small tracts, in order that



the Indian Department may be enabled to give to each Indian a home in his own right, for the use of himself and family. From my personal knowledge, having been in the field in this Territory for the past seven years, as a deputy, I am satisfied that there is nothing that could be done that would tend so much to civilize, as well as christianize, the Indian as to give him a small tract of land, and let him realize that he is a *man*, and that he must depend upon his own exertions to procure a livelihood. This would serve to break up his tribal relations; it would create a desire for agricultural implements, a permanent house instead of the bark "shanty," and a thousand other wants of the civilized man, thereby inducing him to become an inhabitant of one locality rather than a wanderer, seeking a precarious living by the chase, as his forefathers have done for centuries before. The only reservation in this Territory, and the only one in the United States, so far as I know, where the Indians are increasing in number, is the Yakima agency. The Rev. J. H. Wilber has induced about two hundred families to "adopt the habits of the whites" to the extent of becoming farmers. They have selected small parcels of land, built comfortable houses, have good churches, in which they hold regular services, and are fast becoming not only civilized, but christianized. A survey of a portion of the best lands in each principal reservation would be a great blessing to the remaining few who are fast passing away. The Indian is as anxious for a separate piece of land as is the white man, and many are the applications I have had from Indians, while in the field, for a separate piece of land. They want "something they can leave their children, when they go to the 'happy hunting ground.'" The reservations, if surveyed into small tracts and a portion set aside to such as are willing to occupy it, with a proviso that it shall never be sold out of the tribe, would, in my opinion, work a lasting good to a race of people who are now rapidly decreasing in number.

#### TIMBER.

The value of the immense forests of timber, unequaled by that in any other territory within the limits of our national boundary, if not in the world, is now seemingly only becoming apparent to many of the "old settlers," who have hitherto maintained a "stoical indifference" to the vast treasures of wealth by which they are surrounded. Ten years ago a man who would have entered timber land at \$1.25 per acre would have been considered a fit subject for the insane asylum; now timber within a half mile of the sound is worth from 50 cents to \$1 per thousand feet, and when it is taken into consideration that the land will produce from 25,000 to 300,000 feet per acre, it is readily seen that this class of lands, even at this time, is becoming very valuable. A deputy now in the field reports a smooth, sound fir tree 48 feet in circumference, and it is not unfrequently the case that such large trees attain the height of from 250 to 350 feet. No one who is not familiar with the timber of Western Washington can form any correct opinion regarding the amount of lumber that can be taken from an acre of land. There are vast tracts of land that would cover the entire surface of the ground with cord wood 10 feet in height; and, incredible as it may seem, there are localities that would afford double that quantity. East of the Cascade Mountains there is great complaint from the settlers regarding the restrictions the Government has placed on the cutting of timber. They claim, and justly, I think, that the restrictions should be removed, for the following reasons:

First. That all the timber is in mountainous districts, grown upon lands not suitable for cultivation to any considerable extent.

Second. That the settlements are extensive and confined to the plains and valleys which are almost totally destitute of timber for even fire wood.

Third. That all the lumber to meet the demands of the settled portion of the country must come from the mountainous district which is unsettled and unsurveyed, and could not be truthfully taken for actual "settlement and cultivation" if surveyed; and that every settler who improves a farm or builds a house is forced to become a trespasser upon the public domain.

Fourth. That the saw mills which have thus far been erected have only supplied the local demand; that there has never been any lumber shipped out of this immediate locality, nor is there likely to be, from the fact that Walla-Walla County has less timber, and it will cost more to cut lumber in that locality than in any adjoining section of the country within shipping distance.

Fifth. That none of the timber lands are within the lines of withdrawal of the Northern Pacific Railroad, and consequently the cutting and use of this timber would involve the infraction of no individual or vested right.

I would urge the above reasons for adopting, for the time being at least, a reasonable rate of stumpage for all timber taken from the Government lands in that district, thus enabling the citizens to procure the necessary appliances to build houses and fence their farms. The people would willingly pay a rate of stumpage, so that the timber would bring more than the Government is asking for land in the most favorable localities. I am quite familiar with that section of the country, its wants and interests, having spent part of six years as a deputy surveyor in that locality, and I know



the necessities of the settlers are very great regarding a supply of timber for home use.

#### AGRICULTURAL LANDS.

As the Territory becomes settled up and roads are constructed, and the country opened, the fact becomes more apparent every day that Washington Territory has a vast amount of first-class agricultural land. There is scarcely a creek flowing into Puget Sound (and there are hundreds of them) the valleys of which will not afford arable land amply sufficient for from five to a hundred good farms. Localities that a few years since were deemed worthless are now being settled up and are found to contain thousands of acres of excellent farming land. The same is applicable to the agricultural advantages of the country east of the Cascade range of mountains. Land that has been considered worthless a few years since is now covered with waving fields of grain. In the vicinity of Puget Sound honest and faithful deputies only a few years since reported many extensive tracts of land as "swampy and worthless;" now these same deputies are clamorous for contracts to survey these identical "swamps," they having in many instances been drained, and are found to be capable of producing abundant crops of excellent small grains and vegetables. There is a large scope of country, embracing an area of perhaps sixty townships, lying north of Gray's Harbor and west of the Olympic Mountains, which is reported to contain vast tracts of fine agricultural lands. This district of country has been thus far but partially explored, and no very definite information can be given regarding its resources. It is my desire and purpose during the coming autumn, if time and opportunity permit, to make a tour of exploration through that section of the country, in order that more definite information may be obtained regarding its topographical and natural resources. Should the locality referred to be found to contain such large tracts of arable and agricultural lands as have been reported, the coast guide meridian should be extended north to the straits of Juan de Fuca, to afford a guide for surveys; and also, several towns should be sectionized at an early day.

There is scarcely room for doubt that Western Washington is destined at an early day to bear an important part, and will be made to compare favorably with the most celebrated States or sections of our country in the productions of the dairy. As the country and its resources become developed, all that is needed to carry forward this important interest is enterprise and the importation, for a beginning, of a reasonable quantity of good dairy stock. The climate is mild, humid, and well adapted to the purpose. Grass of excellent quality grows at least ten months in the year. Such a thing as a sick animal is rarely known, and with an average temperature of 64° in summer and 39° in winter, cows will give milk the year round, if desirable. With a reduction in the price of labor, that will inevitably follow upon the completion of the Northern Pacific Railroad, there is no legitimate enterprise that would afford so large a return for capital and labor as this branch of industry.

#### HOMES FOR THE POOR.

The crowning glory of Washington Territory is the great advantages it offers to the poor man. Here any man, no matter how poverty-stricken he may be, if he is willing to work, can soon make for himself a comfortable home. There are thousands of acres of vacant land in this Territory that will make excellent farms, awaiting the enterprising farmer. All that the poor man wants in the Territory to commence operations with is a pair of stout and willing hands.

Capital is as desirable in this locality as in any other to open a farm, yet this is one of the few places where a laboring man without any capital can secure a farm, and at the same time support himself and family, if he has one.

There are many ways that the small farmer can make a living, and something to spare. Hay has never sold in the Territory, at the barn, for less than \$10 per ton, and at this time hay that can be shipped on the sound is selling at \$14 per ton, and there is no question but it will pay \$20 for every ton that is fed out to stock on the farm.

People that come to Washington Territory to hunt farms must not expect to find prairie land west of the Cascade Mountains that will pay for farming. What little prairie there is is grass, and only fit for pasture, and poor pasture at that. The good farming land is covered with brush, and in many places with timber. To clear bottom land so that the farmer can sow a crop of wheat or timothy will cost, if he hires it done, about \$25 to the acre, but of course those who have limited means expect to do their own work, clear a small patch each year, and so be gradually adding to the cultivable area.

There are many persons who come to the Territory that are dissatisfied. They expect to find the broad prairie they found thirty years ago in the Western States. Others are expecting to speculate in "terminus town lots," or some other wild-goose enterprise, and make a fortune in a few days. Such usually think the big stories they heard of Washington Territory false, and at once set to abusing private individuals or some



newspaper that happened to tell them just what they wanted to hear, and what was certainly true about Puget Sound, with perhaps this drawback—every man in this Territory, to succeed, must “either hold the plow or drive.”

## EASTERN WASHINGTON.

That portion of this Territory lying east of the Cascade Mountains differs widely from the western portion. There is a great scarcity of timber, and in many localities but little water on the table lands; yet for grain-growing this is the most desirable portion of the Territory. The broad prairies are ready for the plow, with trifling cost of preparation. The soil is most desirable for wheat, rye, oats, and barley, while the low valleys, and localities that can be irrigated, will produce excellent vegetables; and in Walla Walla, Palouse, and Yakima, Indian corn is produced in considerable quantities.

A few years since it was only the lower valleys that were considered of any value for agricultural purposes. Now, some of the most valuable farms in Walla Walla County are located on the foot-hills, and each year the march of the pioneers is upward instead of westward.

During the last two years the Palouse country has been rapidly settling up, and those who first located in that section, for the purpose of grazing stock, have found that the soil produces abundance of all grains and vegetables, and many have taken up lands, and now have farms in a fine state of cultivation. Seven years since, while I was sectionizing four townships in the Kittitass Valley, which at that time had no settlers within twenty-five miles, there was some complaint made on account of the survey, parties condemning the action of the surveyor general for letting contracts for such “worthless country.” That valley now has a population of several hundred. Many beautiful and valuable farms are now being cultivated by an industrious and thrifty people; churches, schools, mills, stores, post offices, and a thousand other indications of civilization.

During the summer of 1869, while surveying township 35 north, of range 39 east of the Willamette meridian, I found on extending the line north through the township, commencing at the south corner of sections 31 and 32, for a distance of over five miles, one continuous field of wheat, none harvesting less than twenty, and often over forty bushels per acre; all grain of excellent quality.

A ditch from the Upper Spokane, following the table land in a southwesterly direction toward White Bluffs, passing north of Big Lake, would furnish the necessary water to irrigate thousands of acres, which would produce abundant crops. This ditch could be constructed at a comparatively small cost, when taking into consideration the vast extent of first quality of land made available.

## MINERALS.

*Coal, &c.*—Washington Territory contains almost the entire catalogue of minerals, and the more precious metals have been successfully mined in several localities for many years. From the mouth of the Umatilla up and along the Columbia River for several hundred miles there have been large amounts of gold taken out every year for the past ten years. At present the principal mining is done by Chinamen, who are experts with the rocker, and are willing to work for a lower rate of wages than the Anglo-Saxon race. Galena (silver and lead) was discovered several years since on the south and east slopes of Mount Rainier, but as yet the lode is undeveloped, and nothing is known regarding its actual value. Traces of gold and silver have been found in the Cascade Mountains at various points, but as yet no systematic efforts have been made to develop their extent or richness. Large quantities of iron and coal are also found west of the Cascade range of mountains, and particularly throughout the valley of Puget Sound. No agencies have thus far been employed toward the development and utilizing of the former, but the time is not far distant when the “iron fields” of Washington Territory will afford extensive and profitable employment for both capital and labor. The number and extent of the vast beds of coal underlying, it is thought, at least one-half of the entire surface of Western Washington, can scarcely be overestimated. The variety, so far as known, is a fair quality of bituminous, burns readily in an open fire, leaving no clinkers and but a small quantity of straw colored ash. The Seattle mine, in King County, is being rapidly developed, and is now producing about 100 tons per day, and the company intend to extend their works to any extent that the demand may require. The Bellingham Bay Coal Company have extensive works in Whatcom County, and with the present appliances the capacity of these mines is reported to be about 500 tons per day. Immediately along the line of the Northern Pacific Railroad, between the Columbia River and Puget Sound, there are immense coal-fields, not less than 300,000 acres of coal-lands, which are likely to be developed at an early day by that enterprising company, and which will add millions of dollars in wealth to the country. Thus far no anthracite coal has been found in this Territory; but many of the most competent judges think



that an exploration of the higher strata found only in the Cascade Mountains will establish the fact that there is coal of that valuable variety in that region.

*Stone.*—Limestone is found in but few sections of this Territory in sufficient quantities for practical uses, the geological formation of the country being generally igneous. There are, however, several valuable ledges of limestone on the islands of San Juan and Orcas, and in quantities sufficient to supply all demands in this locality for an indefinite period.

A few miles from Walla Walla limestone was discovered about a year since, but as yet its extent has not been fully ascertained. North of the Spokane River, and in the vicinity of Fort Colville, and also at Little Dalles on the Upper Columbia River, there are ledges of excellent marble in unlimited quantities, white, gray, and variegated, and all susceptible of fine polish. At Fort Colville is a marble slab, erected at the head of an officer's grave, that was taken from a ledge about two miles southeast of the station. It will compare favorably, in purity of color, beauty of grain, and susceptibility of polish, with stone taken from the finest quarries in the Atlantic States. The contemplated railroad will afford a ready and cheap means of transportation, and Colville Valley will doubtless become celebrated for its marble, for ornamental as well as for building purposes. Sandstone of excellent quality is found in various localities. This quality of stone is now being shipped from Bellingham Bay for the custom house and post office now being erected by the Government at Portland, Oregon. As this quarry has been compelled to compete with all the stone quarries on the Pacific coast, and after a critical examination and thorough test the decision was in favor of the Bellingham Bay stone, it is fair to presume the quality is equal if not superior to any on the coast. Brick of good quality is made in many parts of the Territory, and from the abundance of fuel can be manufactured at very low rates.

I would respectfully recommend that a small appropriation, say ten thousand dollars, be made by Congress to defray the expenses of a geological and mineralogical examination of this Territory during the coming season.

#### NORTHERN PACIFIC RAILROAD.

The construction of this road from the Columbia River on the south, northward to a point within a few miles of the tide waters of Puget Sound, is rapidly approaching completion. A commendable enterprise has been exhibited by this company in the prosecution of this great work.

The greater portion of the country traversed by the line of this road is capable of settlement, and of the lands being brought under a profitable state of cultivation.

The prospect of the early completion of this portion of the road is already producing a marked effect in the tide of immigration, and in the settlement and improvement of the country.

The great natural resources of this section, its vast beds of coal, &c., before referred to, will, as they become developed, stimulate enterprise, invite capital, and lend increased importance in furthering the growth and general prosperity of the whole country.

While the appropriation for surveys for the present fiscal year is quite liberal indeed, and largely exceeding that of former years, the construction of the Northern Pacific Railroad, as well as the rapidly increasing ratio of settlement of various parts of the Territory, earnestly demand increase of appropriation for surveys during the next fiscal year. From all parts of the Territory constant appeals are being made for surveys, which, in many instances, must be denied, owing to the meagerness of appropriation for the surveying service. Not more than one-fourth of the scope of country through which the line of the sixty-five miles of railroad now near completion traverses, is surveyed. A fair proportion of the funds appropriated for the present season will be made available for surveys along this line of road. But this cannot but be greatly insufficient to meet the necessities that exist in the interest of the settlers, as well as the equitable desires of the Northern Pacific Railroad Company. In justice to all these interests, all the cultivable and valuable timbered lands along the entire line of this road, and within the limits of its grant, should be surveyed and segregated at an early day, thus enabling the company to dispose of their lands at pleasure, and affording the settlers upon the public domain the privileges and benefits of the homestead and pre-emption laws.

In connection herewith I would respectfully call your attention to my estimate for the surveying service for the next fiscal year, and request that the amounts stated be recommended to the favorable consideration of Congress. Since this estimate was formed, in further consideration of the subject, and in view of the very liberal and just policy adopted by the Northern Pacific Railroad Company toward the settlers, affording such ample means and opportunities for all who desire homes or to make landed investments, I am satisfied my estimate is less than it should be to meet the reasonable demands for surveys during the next fiscal year.

In connection with this report I would respectfully state that the usual annual map



showing the extent and progress of the surveys, together with the general and more prominent topographical features of the Territory, is now being protracted, and will be completed and duly forwarded within the time prescribed in your letter of instructions to this office.

I have the honor to be, very respectfully, your obedient servant,

L. P. BEACH,  
*Surveyor General of Washington Territory.*

Hon. WILLIS DRUMMOND,  
*Commissioner General Land Office, Washington City, D. C.*

A.—Statement showing the condition of contracts not closed at the date of the last annual report.

Contracts.		Name of deputy.	Description of work.	Remarks.
No.	Date.			
113.	Aug. 31, 1870	Edward Giddings.	Fourth standard parallel north, through 3, 4, and 5 east, Willamette meridian. Exteriors townships 17, 18, and 19 north, range 4 and 5 east. Exteriors and subdivisions township 20 north, range 5 east.	Completed through ranges 3 and 4; balance surrendered.  Completed through range 4 east; balance surrendered.  Completed.
114.	Sept. 2, 1870	Peter W. Crawford	Subdivisional lines fractional township No. 5 north, range 2 east, and No. 9 north, range 6 west. Subdivisions township No. 7 north, range 1 west.	Completed.  Released from survey, and work relet to L. Farnsworth, 1871.
117.	Oct. 18, 1870	Geo. F. Whitworth	Subdivisional lines of township No. 23 north, range 6 east.	Unable to execute the work; released from contract.

SURVEYOR GENERAL'S OFFICE,  
*Olympia, Washington Territory, June 30, 1872.*

L. P. BEACH,  
*Surveyor General, Washington Territory.*

B.—Showing the amount, character, and condition of public surveys in Washington Territory, contracted for under appropriation for the fiscal year ending June 30, 1872.

Contract.		Name of deputy.	Character and location of work.	Estimated No. of miles.	Rate per mile.	Estimated cost of work.	Remarks.
No.	Date.						
120	1871. June 5	Edw'd Richardson.	Exterior boundaries of township 8 north, ranges 24, 25, 26, 27, and 28 east, Willamette meridian. Subdivisions of township 8 north, ranges 24, 25, 26, 27, and 28 east, and township 4 north, ranges 13 and 14 east, and township 5 north, range 14 east.	48	\$12	\$576	Completed.
				480	10	4,800	Completed.
121	June 10	Levi Farnsworth.	The fourth standard parallel through ranges 18, 17, 16, and 15 east, Willamette meridian. Exterior boundaries of townships 17 north, ranges 17 and 18 east; 18 north, range 18 east; 9 north, range 5 west; and 10 north, range 6 west. The subdivisions of townships 17 north, ranges 17 and 18 east; 7 north, range 1 west; 9 north, range 5 west; 19 north, range 6 west; and fractional townships 3 and 4 north, range 3 east.	24	15	360	Completed.
				66	13½	891	Completed.
				341	11	3,741	Completed.



B.—Statement showing the amount, character, and condition of public surveys, &amp;c.—Cont'd.

Contract.		Name of deputy.	Character and location of work.	Estimated No. of miles.	Rate per mile.	Estimated cost of work.	Remarks.
No.	Date.						
122	1871. June 14	Alf. H. Simmons..	Exterior lines of townships 6, 7, and 8 north, range 38 east.	27	\$12	\$324	Completed.
			The subdivisions of townships 6, 7, and 8 north, range 38 east, and fraction of townships 6 and 7 north, range 37 east.	151	10	1, 510	Completed.
123	June 19	Lewis P. Beach...	Exterior lines of townships 19 north, range 35 east; 18 north, range 37 east; 25 and 26 north, range 39 east; 13, 14, 15, and 16 north, range 30 east; and 13 and 14 north, range 31 east.	114	12	1, 368	Completed.
			Subdivisions of townships 18 and 19 north, range 35 east; 25 and 26 north, range 39 east; 13, 14, 15, and 16 north, range 30 east; and 13 and 14 north, range 31 east.	600	10	6, 000	Completed.
124	June 21	D. F. & C. N. Byles	Fifth standard parallel through ranges 7, 8, 9, and 10 west.	24	18	432	(*)
			Exterior lines of townships 9 north, range 9 west, and 20 north, ranges 9 and 10 west.	24	15	360	Completed.
			Subdivision township 20 north, ranges 9 and 10 west.	120	12	1, 440	Completed.
125	July 1	John A. Cornelius.	Exterior lines of townships 40 north, range 1 east; 34 and 35 north, ranges 1 and 2 east; 35 north, range 3 east; 36 north, ranges 2 and 3 east; 31, 32, 33, and 34 north, range 4 east.	102	15	1, 530	Completed.
			Subdivisions of townships 40 north, range 1 east; 39 north, range 2 east; 34 and 35 north, ranges 1 and 2 east; 36 north, ranges 2 and 3 east; 31 and 32 north, range 3 east; and 34 north, range 4 east.	{ 45 242	{ 10 12	{ 450 2, 904	{ Com- pleted.†
126	July 6	Edward Giddings.	Exterior lines of townships 6 north, ranges 24 and 25 east; 7 north, range 25 east; and 8 north, range 23 east.	30	12	360	Completed.
			Subdivisions of townships 6, 8, 10, and 11 north, range 23 east; 6 and 7 north, ranges 24 and 25 east; and 8 north, range 29 east.	540	10	5, 400	Completed.
27	July 8	Walter B. Hall....	The exterior subdivisions and meander lines of township 27 north, range 6 east.	{ 12 80	{ 15 12	{ 180 960	{ Completed. Completed.
129	Aug. 12	Freeman W. Brown	The exterior and subdivisional lines of townships 6, 7, and 8 north, range 1 east;	.....	.....	.....	In progress†
			And subdivisional lines of township 8 north, range 1 west, and the unsurveyed portion of township 15 north, range 3 west.	{ 30 252	{ 15 12	{ 450 3, 024	{ Completed. Completed.
133	1872. Jan. 29	Alex'r M. Adams.	Second standard parallel through range 1 east, Willamette meridian.	6	18	108	Completed.
			Exterior and subdivisional lines of township 8 north, range 1 east, Willamette meridian.	{ 12 60	{ 15 12	{ 180 720	{ Completed. Completed.

\* Twelve miles completed, balance relinquished.

† With the exception of section lines of township 34 north, range 4 east, the appropriation being insufficient to cover survey.

‡ Completed since June 30, 1872.

SURVEYOR GENERAL'S OFFICE,  
Olympia, W. T., June 30, 1872.L. P. BEACH,  
Surveyor General, Washington Territory.



C.—Statement showing the number of plats made, and number of copies transmitted to the General Land Office, and to the district land offices in Washington Territory, during the fiscal year ending June 30, 1872.

Exterior boundaries.	Township subdivided.	Description of plats.	Original.	General Land Office.	District land offices.	Total.	When transmitted.
1	1	Township 5 north, range 2 east .....	1	1	1	3	July 31, 1871
	2	Townships 11 and 12 north, range 1 west.....	2	2	2	6	Aug. 2, 1871
	1	Township 18 north, range 3 east.....	1	1	1	3	Aug. 17, 1871
	1	Township 4 north, range 21 east.....	1	1	1	3	Aug. 24, 1871
1	2	Townships 18 north, ranges 1 and 2 east .....	2	2	2	6	Sept. 16, 1871
1	1	Township 3 north, range 3 east .....	1	1	1	3	Sept. 5, 1871
1	1	Township 9 north, range 6 west.....	1	1	1	3	Sept. 14, 1871
2	2	Townships 25 and 26 north, range 39 east .....	3	3	3	9	Sept. 20, 1871
3	2	Townships 19 north, range 9 west, and 20 north, ranges 9 and 10 west.	3	3	2	8	Sept. 30, 1871
	1	Township 18 north, range 9 west .....	1	1	1	3	Sept. 30, 1871
1	1	Township 34 north, range 2 east .....	1	1	1	3	Oct. 14, 1871
	3	Townships 31, 32, and 33 north, range 3 east.....	3	3	3	9	Oct. 14, 1871
1		Township 18 north, range 37 east.....	1	1	...	2	Oct. 21, 1871
1	2	Township 18 and 19 north, ranges 35 east .....	2	2	2	6	Oct. 21, 1871
5		Township 8 north, ranges 24, 25, 26, 27, and 28 east .....	1	1	...	2	Nov. 1, 1871
	3	Townships 8 north, ranges 24 and 28 east, and 5 north, range 14 east.	3	3	3	9	Nov. 1, 1871
1	4	Townships 6, 8, 10, and 11 north, range 23 east.....	4	4	4	12	Nov. 28, 1871
	1	Township 8 north, range 29 east .....	1	1	1	3	Nov. 28, 1871
	1	Township 4 north, range 3 east .....	1	1	1	3	Dec. 1, 1871
1	1	Township 27 north, range 6 east .....	1	1	1	3	Dec. 18, 1871
3		Townships 18 and 19 north, range 4 east, and 20 north, range 5 east.	1	1	...	2	Dec. 23, 1871
	2	Townships 6 and 7 north, range 37 east.....	2	2	2	6	Dec. 30, 1871
2	3	Townships 7, 8, and 9 north, range 38 east.....	3	3	3	9	Dec. 30, 1871
	1	Township 9 north, range 39 east.....	1	1	1	3	Dec. 30, 1871
4	4	Townships 6 and 7 north, ranges 24 and 25 east .....	4	4	4	12	Jan. 26, 1872
1	1	Township 6 north, range 1 east .....	1	1	1	3	Jan. 30, 1872
	1	Township 8 north, range 25 east.....	1	1	1	3	Feb. 2, 1872
6		Townships 13, 14, 15, and 16 north, range 30 east, and 13 and 14 north, range 31 east.	1	1	...	2	Feb. 6, 1872
	1	Township 30 north, range 5 east .....	1	1	1	3	Feb. 10, 1872
	4	Townships 13, 14, 15, and 16 north, range 30 east.....	4	4	4	12	Feb. 12, 1872
	2	Townships 13 and 14 north, range 31 east.....	2	2	2	6	Feb. 12, 1872
3	4	Townships 35 and 36 north, range 1 and 2 east .....	4	4	4	12	Feb. 21, 1872
	1	Township 39 north, range 2 east .....	1	1	1	3	Feb. 21, 1872
2	2	Townships 25 and 26 north, range 2 west .....	2	2	2	6	Mar. 7, 1872
	1	Township 8 north, range 1 west .....	1	1	1	3	Mar. 12, 1872
2	2	Townships 17 north, ranges 17 and 18 east .....	2	2	2	6	Mar. 26, 1872
1	1	Townships 18 north, range 18 east, and 7 north, range 1 west..	2	2	1	5	Mar. 26, 1872
	2	Township 8 north, ranges 26 and 27 east .....	2	2	2	6	May 4, 1872
	1	Township 34 north, range 1 east .....	1	1	1	3	May 7, 1872
	1	Township 29 north, range 3 east .....	1	1	1	3	May 18, 1872
	1	Township 20 north, range 5 east .....	1	1	1	3	June 5, 1871
	1	Township 4 north, range 14 east .....	1	1	1	3	June 8, 1872
	1	Township 33 north, range 3 east .....	1	1	1	3	June 11, 1872
1	1	Township 40 north, range 1 east .....	1	1	1	3	June 21, 1872
1	2	Townships 36 north, range 3 east, and 33 north, range 2 east.	2	2	2	6	June 21, 1872
1	1	Township 9 north, range 1 east .....	1	1	1	3	July 10, 1872
	1	Township 4 north, range 13 east.....	1	1	1	3	July 18, 1872
2	2	Townships 9 north, range 5 west, and 10 north, range 6 west.	2	2	2	6	July 30, 1872
4		Townships 31, 32, 33, and 34 north, range 4 east.....	1	1	...	2	
DONATION CLAIM PLATS.							
		Townships 19 and 20 north, range 1 east .....	2	2	2	6	
		Township 19 north, range 2 east .....	1	1	1	3	
		Townships 17 and 18 north, range 2 east .....	2	2	2	6	
		Township 18 north, range 3 east.....	1	1	1	3	
		Diagrams, township 10 north, range 1 west.....	...	...	1	1	
		Diagrams, townships 11 and 12 north, range 1 west.....	1	1	1	3	
		Diagrams, township 20 north, range 2 east .....	1	1	1	3	
		Diagrams, township 24 north, range 4 east .....	1	1	1	3	
		Diagrams, township 18 north, range 1 east .....	1	1	1	3	
		Diagrams, townships 19 and 20 north, range 2 east.....	1	1	1	3	



C.—Statement showing the number of plats made, &c.—Continued.

Exterior boundaries.	Township subdivided.	Description of plats.	Original.	General Land Office.	District land office.	Total.	When trans- mitted.
		MISCELLANEOUS.					
		Fifth standard parallel north, ranges 9 and 10 west .....	1	1	.....	2	
		Fourth standard parallel north, ranges 15, 16, 17, 18 .....	1	1	.....	2	
		Territorial maps, in progress .....	1	1	.....	2	
50	74	Total.....	96	96	87	279	
		Total number of plats made .....					

SURVEYOR GENERAL'S OFFICE,  
*Olympia, Washington Territory June 30, 1872.*

L. P. BEACH,  
*Surveyor General, Washington Territory.*

D.—Statement showing the number of linear miles run, the rate per mile, and the total cost of surveys in Washington Territory during the fiscal year ending June 30, 1872.

EXHIBIT No. 1.

Description of work.	Distance.	Rate per mile.	Total cost.
	<i>Mls. ch. lks.</i>		
Standard lines.....	60 67 57	\$10 to \$18	\$944 45
Township lines.....	468 78 01	12 to 15	6, 195 72
Section lines .....	3, 214 47 01	10 to 12	33, 921 38
Meander lines.....	315 48 38	16 to 12	3, 579 83
Total number of miles run.....	4, 060 00 97		
Total cost of surveys .....			44, 641 38

EXHIBIT No. 2.

Sources from which work is payable.	Miles.	Chains.	Links.	Cost.
Amount of field work under appropriation for fiscal year ending June 30, 1871.....	413	51	17	\$4, 442 62
Amount of field work under appropriation for fiscal year ending June 30, 1872.....	3, 439	72	98	37, 948 70
Amount of field work payable from special deposits.....	206	36	82	2, 250 06
Total number of miles .....	4, 060	00	97	
Total cost of work .....				44, 641 38

L. P. BEACH,  
*Surveyor General, Washington Territory.*

SURVEYOR GENERAL'S OFFICE,  
*Olympia, June 30, 1872.*



E.—Statement showing the number and designation of the townships and the number of acres surveyed in Washington Territory during the fiscal year ending June 30, 1872.

No.	Townships surveyed.	Acres.	Remarks.
1	Township 3 north, range 3 east .....	11, 525. 32	Partial.
2	Township 4 north, range 3 east .....	10, 246. 00	Do.
3	Township 4 north, range 13 east .....	23, 210. 94	Complete.
4	Township 4 north, range 14 east .....	23, 062. 59	Do.
5	Township 4 north, range 21 east .....	22, 995. 60	Fractional.
6	Township 5 north, range 2 east .....	7, 644. 28	Partial.
7	Township 5 north, range 14 east .....	22, 508. 85	Do.
8	Township 6 north, range 1 east .....	22, 967. 94	Complete.
9	Township 6 north, range 23 east .....	22, 975. 28	Do.
10	Township 6 north, range 24 east .....	22, 525. 36	Do.
11	Township 6 north, range 25 east .....	22, 685. 51	Do.
12	Township 6 north, range 37 east .....	.....	Two section lines.
13	Township 7 north, range 1 west .....	18, 567. 34	Partial.
14	Township 7 north, range 24 east .....	21, 905. 29	Complete.
15	Township 7 north, range 25 east .....	22, 917. 39	Do.
16	Township 7 north, range 37 east .....	2, 560. 00	Partial.
17	Township 7 north, range 38 east .....	13, 505. 31	Do.
18	Township 8 north, range 1 west .....	23, 062. 00	Complete.
19	Township 8 north, range 23 east .....	22, 729. 00	Do.
20	Township 8 north, range 24 east .....	21, 384. 69	Do.
21	Township 8 north, range 25 east .....	22, 869. 41	Do.
22	Township 8 north, range 26 east .....	22, 801. 37	Do.
23	Township 8 north, range 27 east .....	22, 766. 16	Do.
24	Township 8 north, range 28 east .....	22, 678. 45	Do.
25	Township 8 north, range 29 east .....	22, 748. 60	Do.
26	Township 8 north, range 38 east .....	23, 059. 18	Do.
27	Township 9 north, range 1 east .....	23, 144. 60	Do.
28	Township 9 north, range 5 west .....	22, 999. 83	Do.
29	Township 9 north, range 6 west .....	16, 718. 63	Fractional.
30	Township 9 north, range 38 east .....	12, 800. 08	Partial.
31	Township 9 north, range 39 east .....	19, 188. 12	Do.
32	Township 10 north, range 6 west .....	22, 986. 52	Complete.
33	Township 10 north, range 23 east .....	22, 986. 30	Do.
34	Township 11 north, range 1 west .....	1, 723. 38	Partial.
35	Township 11 north, range 23 east .....	22, 903. 12	Complete.
36	Township 12 north, range 1 west .....	4, 860. 59	Partial.
37	Township 13 north, range 30 east .....	23, 059. 30	Complete.
38	Township 13 north, range 31 east .....	23, 001. 32	Do.
39	Township 14 north, range 30 east .....	23, 131. 34	Do.
40	Township 14 north, range 31 east .....	23, 056. 81	Do.
41	Township 15 north, range 30 east .....	23, 015. 37	Do.
42	Township 16 north, range 30 east .....	22, 896. 46	Do.
43	Township 17 north, range 17 east .....	23, 031. 62	Do.
44	Township 17 north, range 18 east .....	23, 050. 47	Do.
45	Township 18 north, range 1 east .....	8, 077. 58	Fractional.
46	Township 18 north, range 2 east .....	22, 938. 24	Complete.
47	Township 18 north, range 3 east .....	22, 717. 26	Do.
48	Township 18 north, range 9 west .....	109. 75	Resurvey of meander line.
49	Township 18 north, range 35 east .....	22, 973. 67	Complete.
50	Township 19 north, range 35 east .....	22, 912. 85	Do.
51	Township 20 north, range 5 east .....	22, 199. 31	Do.
52	Township 20 north, range 9 west .....	22, 708. 90	Do.
53	Township 20 north, range 10 west .....	22, 845. 41	Do.
54	Township 25 north, range 2 west .....	7, 977. 43	Fractional.
55	Township 25 north, range 39 east .....	22, 977. 09	Complete.
56	Township 26 north, range 2 west .....	5, 344. 50	Fractional.
57	Township 26 north, range 39 east .....	22, 962. 28	Complete.
58	Township 27 north, range 6 east .....	21, 948. 46	Do.
59	Township 29 north, range 3 east .....	19, 279. 63	Fractional.
60	Township 30 north, range 5 east .....	15, 372. 38	Do.
61	Township 31 north, range 3 east .....	994. 61	Do.
62	Township 32 north, range 3 east .....	4, 595. 35	Do.
63	Township 33 north, range 2 east .....	472. 30	Do.
64	Township 33 north, range 3 east .....	1, 327. 98	Do.
65	Township 33 north, range 3 east .....	3, 188. 93	Do.
66	Township 34 north, range 1 east .....	5, 336. 26	Do.
67	Township 34 north, range 2 east .....	6, 721. 44	Do.
68	Township 35 north, range 1 east .....	7, 519. 28	Do.
69	Township 35 north, range 2 east .....	4, 924. 90	Do.
70	Township 36 north, range 1 east .....	1, 356. 40	Do.
71	Township 36 north, range 2 east .....	1, 153. 30	Do.
72	Township 36 north, range 3 east .....	16, 321. 94	Do.
73	Township 39 north, range 2 east .....	22, 771. 26	Complete.
74	Township 40 north, range 1 east .....	22, 391. 06	Fractional.
Amount surveyed during the year .....		1, 232, 878. 07	
Amount previously surveyed .....		5, 954, 437. 34	
Total number of acres surveyed in the Territory ..		7, 187, 315. 41	

L. P. BEACH,  
Surveyor General, Washington Territory.



F.—Statement showing the amount and condition of appropriation and the amount paid on contracts for surveys made for and up to the close of the fiscal year ending June 30, 1872.

EXHIBIT No. 1.

No. of contract.	Name of deputy.	Estimated amount of contracts.	Amount paid on contracts.	Remarks.
120	Edwin Richardson.....	\$5,376 00	\$5,459 82	Completed.
121	Levi Farnsworth .....	5,000 00	4,982 70	Completed.
122	Alfred H. Simmons.....	1,834 00	2,333 42	Completed.
123	Lewis P. Beach.....	7,368 00	7,359 97	Completed.
124	D. F. & C. N. Byles.....	2,192 00	2,262 27	Completed.
125	John A. Cornelius.....	5,574 00	5,946 10	Completed.
126	Edward Giddings .....	5,832 00	5,759 86	Completed.
127	Walter B. Hall.....	1,140 00	1,214 29	Completed.
129	Freeman W. Brown .....	3,564 00	3,478 92	Completed.*
133	Alexander M. Adams.....	1,008 00	1,010 11	Completed.
	Estimated amount under contact.....	38,888 00		
	Aggregate amount paid on contracts up to the close of the fiscal year.		39,807 46	

\* Completed since June 30, 1872.

EXHIBIT No. 2.

Balance unexpended appropriation 1871.....	\$4,727 60
Paid on contracts since completed.....	\$4,442 62
Balance reverting to United States Treasury.....	284 98
Total.....	4,727 60
Amount of appropriation for the fiscal year ending June 30, 1872.....	\$40,000 00
Amount paid on contracts as above.....	39,807 46
Balance .....	192 54

L. P. BEACH,  
Surveyor General, Washington Territory.

SURVEYOR GENERAL'S OFFICE,  
Olympia, Washington Territory, June 30, 1872.

G.—Statement showing the amount and condition of special deposits made for surveys of public lands in Washington Territory during the fiscal year ending June 30, 1872.

EXHIBIT No. 1.

Date of deposit.	Name of depositor.	Amount deposited.		
		For field work.	For office work.	Total.
Sept. 6, 1871	Charles N. Allen .....	\$200 00		
Sept. 6, 1871	Oscar F. Albee.....	200 00		
Sept. 6, 1871	L. I. While .....	176 00		
Sept. 6, 1871	H. Mills .....		\$70 00	\$646 00
Sept. 13, 1871	Benjamin F. Turner.....	200 00		
Sept. 13, 1871	Cambell Whitney.....	48 00	50 00	
Sept. 13, 1871	Thomas Pierce .....	200 00		
Sept. 13, 1871	Angus McDonald .....	184 00	50 00	732 00
Nov. 10, 1871	M. D. Smith.....	200 00		
Nov. 10, 1871	Albert Jennings .....	200 00		
Nov. 10, 1871	J. S. Wallace.....	200 00		
Nov. 10, 1871	George Brackett.....	100 00	75 00	775 00
Jan. 29, 1872	Christopher Anderson .....	200 00		
Jan. 29, 1872	Morris J. Johus.....	200 00		
Jan. 29, 1872	William Palmer .....	100 00		
Jan. 29, 1872	Peter Morgan.....	100 00		
Jan. 29, 1872	Henry Mohlman.....	100 00		
Jan. 29, 1872	James A. Wilson.....	100 00	75 00	875 00
Apr. 1, 1872	George A. Weed .....	200 00		
	George D. Short.....	70 00	50 00	320 00
	Total.....	2,978 00	370 00	3,348 00



EXHIBIT No. 2.

No. and date of contract.		Name of deputy.	Cost of office work.	Cost of field work re-turned by deputy.	Excess of work over deposit.	Surplus of deposit.	Total amount deposited.
130	Oct. 11, 1871	E. M. Morgan.....	\$100 00	\$847 42	\$215 42	.....	\$732 00
131	Nov. 6, 1871	D. S. B. Henry .....	75 00	675 00	.....	.....	775 00
132	Nov. 20, 1871	Walter B. Hall.....	70 00	580 89	4 89	.....	646 00
134	Mar. 2, 1872	.....do .....	75 00	772 06	.....	\$27 94	875 00
135	Apr. 10, 1872	D. S. B. Henry .....	50 00	284 97	14 97	.....	320 00
			370 00	+3,160 34	-235 28	+27 94	=3,348 00

Estimated—work in progress.

L. P. BEACH,  
*Surveyor General, Washington Territory.*

SURVEYOR GENERAL'S OFFICE,  
*Olympia, June 30, 1872.*

H.—Statement showing account of appropriation for salary of surveyor general of Washington Territory for the fiscal year ending June 30, 1872.

1871.			1871.		
Sept. 30	To account of E. P. Ferry, for first quarter's salary.	\$625 00	June 1	By appropriation by act of Congress, for salary of surveyor general of Washington Territory, for the fiscal year ending June 30, 1872.	\$2,500 00
Dec. 31	To account of E. P. Ferry, for second quarter's salary.	625 00			
1872.					
Mar. 31	To account of E. P. Ferry, for third quarter's salary.	625 00			
June 5	To account of E. P. Ferry, for salary to June 5, 1872.	446 43			
June 30	To account of L. P. Beach, for salary from June 5 to June 30, 1872.	178 57			
		2,500 00			2,500 00

L. P. BEACH,  
*Surveyor General, Washington Territory.*

SURVEYOR GENERAL'S OFFICE,  
*Olympia, June 30, 1872.*

I.—Statement showing account of appropriation for compensation of clerks and draughtsman in the office of the surveyor general of Washington Territory for the fiscal year ending June 30, 1872.

1871.			1871.		
Sept. 30	To amount paid clerks and draughtsman, first quarter, as per accounts rendered.	\$1,125 00	July 1	By amount of appropriation by act of Congress, for compensation for clerical service in the office of the surveyor general of Washington Territory, for the fiscal year ending June 30, 1872.	\$4,000 00
Dec. 31	To amount paid clerks and draughtsman, second quarter, as per accounts rendered.	1,425 00			
1872.					
Mar. 31	To amount paid clerks and draughtsman, third quarter, as per accounts rendered.	1,125 00		By amount of special deposits applicable to clerical service.	450 00
				By balance.....	225 00
June 30	To amount paid clerks and draughtsman, fourth quarter, as per accounts rendered.	1,000 00			
		4,675 00			4,675 00

L. P. BEACH,  
*Surveyor General, Washington Territory.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Olympia, June 30, 1872.*



J.—Statement showing account of office rent, stationery, fuel, pay of messenger, and incidental expenses of the surveyor general's office for Washington Territory for the fiscal year ending June 30, 1872.

1871. Sept. 30	To amount paid, first quarter, as per vouchers and accounts rendered.	\$270 00	1871. July 1	By appropriation by act of Congress for the fiscal year ending June 30, 1872.	\$2,000 00
Dec. 31	To amount paid, second quarter, as per vouchers and accounts rendered.	854 60			
1872. Mar. 31	To amount paid, third quarter, as per vouchers and accounts rendered.	352 33			
June 30	To amount paid, fourth quarter, as per vouchers and accounts rendered.	460 86			
	Balance .....	62 21			
		2,000 00			2,000 00

L. P. BEACH,  
Surveyor General, Washington Territory.

SURVEYOR GENERAL'S OFFICE,  
Olympia, June 30, 1872.

K.—Statement showing the estimated amount required for the surveying service in the district of Washington Territory for the fiscal year ending June 30, 1872.

FOR FIELD WORK.

Surveying extensions of standard parallel and meridian lines .....	\$9,500 00
Surveying exterior township lines .....	15,500 00
Surveying section and meander lines .....	71,800 00
	96,800 00

FOR OFFICE WORK.

Salary of surveyor general .....	\$2,500 00
Salary of chief clerk .....	1,800 00
Salary of draughtsman .....	1,600 00
Salary of assistant draughtsman .....	1,400 00
Salary of two clerks, at \$1,200 each .....	2,400 00
Rent of office, stationery, fuel, lights, wages of messenger, and incidentals .....	2,000 00
	11,700 00
Total estimate .....	108,500 00

L. P. BEACH,  
Surveyor General, Washington Territory.

SURVEYOR GENERAL'S OFFICE, Olympia, July 1, 1872.

Q.—Report of the surveyor general of Wyoming Territory.

SURVEYOR GENERAL'S OFFICE,  
Cheyenne, Wyoming Territory, September 30, 1872.

SIR: In compliance with your special instructions, I have the honor to submit herewith, in duplicate, my annual report upon the surveying service in Wyoming during the fiscal year ending June 30, 1872.

PROGRESS OF THE PUBLIC SURVEYS.

The surveys of 1870 and 1871 comprised the running of part of the third and all of the fourth, fifth, and sixth standard parallels, from the State line of Nebraska, westward



124 miles to the tenth guide meridian, at Elk and Medicine Bow Mountains, all parallel to each other, and 24 miles apart.

Also, the running the eighth and ninth guide meridians, 72 miles each, and 43 miles of the tenth guide. Also, the running of a sufficient number of range and township lines within these out boundaries to enable me to complete the subdivision into sections of all the townships along the Union Pacific Railroad, from the Nebraska line to Percy, (near Elk Mountain,) a distance of 190 miles along the railroad, excepting two townships on the Laramie Mountain, east of Sherman.

The fourth standard has been surveyed through the whole length of the Territory, from Nebraska to Utah, a distance of 364 miles in one continuous westward line, over all the mountains and valleys along its course. This line remained south of the railroad, from near Laramie City, to Bridger station, 24 miles east of the Utah boundary at Bear River.

I was thus enabled to use this line as a base of operations, in extending the surveys north, up to the railroad, at the most important points, and also to survey four townships in the valley of Bear River, and locate the town of Evanston, and the great coal mines in that vicinity.

I have also caused to be surveyed the two most valuable iron and timber townships on the Laramie Mountain, and have under contract the extension of the surveys across the North Platte to Rawlins in order to reach the valuable iron deposits at that place; also the survey of the valuable Rock Spring coal mines, on the railroad, near Green River.

In addition to this I have extended the township and subdivisional work northward, from the fourth to the sixth standard, and between the eastern base of the Laramie Mountain and the eighth guide, in order to accommodate the stock growers, who are settling in the valleys of Horse, Bear, Chug, Richard, and Sybille Creeks, as far north as the Laramie River, and prefer to locate near the mountain, where wood and water most abound.

#### BOUNDARIES, AREA, AND SURFACE ASPECT OF WYOMING.

Wyoming reaches into the Rocky Mountains, westward to the eastern rim of the Salt Lake Basin, nearly four hundred miles, or seven degrees of longitude, with Nebraska and Dakota on the east, and Utah and Idaho on the west.

North and south she spreads over four degrees of latitude, with Montana on the north, and Colorado (and a part of Utah) on the south.

Her area covers 97,882 square miles, being as large as Ohio, Indiana, Massachusetts, New Hampshire, Connecticut, and Rhode Island combined.

Within her mountains are situated three great table land plains or basins the Laramie Plains and Platte River Valley, extending from near Sherman along the railroad to Creston, and as large as Massachusetts; the Green River Basin or Valley, extending west from Creston to Piedmont, and from the Colorado line north to the head of Green and Sweetwater Rivers, with an area of about fifteen thousand square miles, or twice as large as Massachusetts, and largely underlaid with lignite coal; and the Big Horn Valley or Basin, larger than the State of Connecticut, partly underlaid with coal, and fertile as Salt Lake Valley, and, like it, surrounded by mountains, with only one outlet into the Yellowstone River, through the famous Big Horn Cañon of some forty miles in length.

Through the first two great mountain basins or plains the Union Pacific Railroad is located, and their average altitude is not far from 6,500 feet, the surface alternating between 6,100 feet at the railroad crossing of Green River, and a trifle more at Platte River, and 7,100 feet at Laramie City, Creston, and Piedmont.

No rivers of importance rise in Wyoming except in the northwest corner, in the Wind River Mountains, near Fremont's Peak. Here the Yellowstone, Green, and Sweetwater Rivers, and some branches of Snake River (of Idaho) take their rise. The North Platte and Big Laramie rise in the mountains of Colorado, and also the South Platte, Arkansas, Rio Grandé, and Grand Rivers.

Green River Basin is the drained bottom of a vast fresh water lake within the mountain regions during the tertiary period, at which time the extensive lignite coal deposits known to exist there were formed. This great basin became dry land by some fracture in the Uintah range of mountains, south of Wyoming, through which the waters found their exit, and cut out the great Green River cañons so lately and boldly explored by Professor Powell.

Nearly the whole surface of this basin is covered with sage, with grass only along the streams.

The basin or plains of the Laramie and Platte Valleys are mostly covered with a nutritious gramma or buffalo grass, well adapted to extensive raising of sheep, horses, and cattle. A considerable portion of this area is underlaid with lignite coal deposits, and, like the Green River Basin, is the drained bed of a fresh water lake as large as Lake Michigan during the tertiary age. The lake was drained by fractures in the



Laramie and Sweetwater Ranges, creating cañons through which the Laramie and Platte Rivers now flow out from the basin.

The waters of the Green River Basin flow into the Pacific, through the Colorado; those from the Laramie Basin into the Atlantic, through the Platte; while those of the Big Horn Basin flow through the Yellowstone.

*The Yellowstone Lake Basin* lies principally within Wyoming, and is deserving of notice on account of its wonderful geysers and hot springs, which are already attracting a world wide attention, and will in the near future become as favorite a resort for invalids and pleasure seekers as the Yosemite and Geysers of California.

The people of Wyoming, and the nation at large, have reason to thank Professor Hayden and Congress for the setting apart of this wonderful place to the uses of a national park, which will become one of the most famous summer resorts on the continent as soon as it can be reached by railroad.

The plains of Wyoming, east of the Laramie and Big Horn Mountains, slope gradually to the east and north. At Cheyenne they have an altitude of 6,000 feet, from which they slope east and north into the North Platte. East of the Big Horn Mountains they have less altitude, and slope northeast into the Missouri and Yellowstone Rivers, giving rise to the Cheyenne, Powder, Tongue, and other streams, and are well adapted to grazing and agricultural purposes.

The northeast part of Wyoming is as well adapted to agriculture and stock raising as Colorado. The altitude is less, more rain falls, and the grasses are more luxuriant. The interior table lands, through which the Union Pacific Railroad passes, bear no adequate comparison with the country between Cheyenne and the Yellowstone, and with the Big Horn Basin, for purposes of agriculture and stock raising.

This valuable portion of Wyoming is now mainly occupied by the Sioux Indians for hunting grounds; but it should not be thus occupied much longer—and probably will not be—for it covers an area as large as Massachusetts.

These Wyoming plains, which skirt the eastern base of the mountains through four degrees of latitude, are also of the tertiary age, and very fertile when supplied with water. They formed the western border of an ancient fresh water tertiary sea, larger than the Mediterranean Sea, and are extensively underlaid with lignite coal deposits, as in the Green River Basin.

#### MOUNTAIN RANGES.

The mountains of Wyoming have not the average altitude, nor are they so compactly clustered together, as those of Colorado. The highest is Fremont's Peak, in the Wind River Range, 13,000 feet in altitude. Laramie Peak and Elk Mountain are 11,000 feet, and the central portions of the Medicine Bow and Big Horn Mountains, 12,000 feet.

They present the same general geological characteristics as those of Colorado, acquiring considerable of their altitude during the cretaceous period, and are heavily flanked by metamorphic strata.

*The Laramie Range*, on which Sherman is located, is a continuation northward of the Colorado Snowy Range, west of and around Long's Peak. Its course is nearly north and south. Its general width is 18 miles, until it reaches Laramie Peak, where it spreads out fan like, a portion trending to the northwest, toward Fort Fetterman and the Big Horn Range, and a portion trending west to meet the Seminoe Mountains at the cañon of the North Platte. Its height varies from 7,000 to 9,000 feet.

The central portion of this mountain, at the railroad, is composed of alternating beds of red and gray syenite. Its western border is chiefly red syenite, while its eastern half is composed of black and gray gneiss, alternating with beds of red syenite and veins of quartz. Here will be found veins of gold and silver, when carefully prospected, though perhaps not of the same strength and richness as those in the more central parts of the Colorado Mountains. Farther north, along the Sybylle, the black, gray, and red gneissoid rocks predominate, and continue thus to Laramie Peak, which is composed principally of compact gray gneiss, (by some called gray granite,) with alternating belts of pink-colored granite, like that found interlaced with the gray gneiss at Central City, Colorado.

Between the Laramie River and Laramie Peak, on both the east and west sides of the mountain, there are extensive areas of black gneissoid slates, penetrated by veins of quartz, which are no doubt gold bearing. On the west side, the alternating beds of gray with black gneiss will probably furnish veins of argentiferous galena, as in the Ferris district of West Seminoe Mountain, where I examined some very promising veins of argentiferous galena this summer.

The extension of the Laramie Range westward, as well as northward, retains this same geological character, and continues through the Seminoe and Sweetwater Mountains in their western trend, on the south side of Sweetwater Valley, to the old "South Pass."

*The Medicine Bow Range* is also a northern extension of the Colorado Mountains, and Elk Mountain is its northern extremity. Its course is north and south; its length fifty



miles, and width about twenty-five miles. Its snow clad summit is always visible from Sherman and Laramie City, in a western direction. It lies east of the North Platte, and west of Laramie River, and in range with the eastern mountain rim of the North Park of Colorado. Its summits range from 8,000 to 12,000 feet in altitude.

The newer stratified rocks do not rise up against its western and northern sides. Thus the metamorphic rocks are exposed down to the edge of the surrounding plain.

On the eastern side, the sedimentary rocks rise up against the metamorphic. Rock Creek rises in the northern part; runs north in a deep, narrow cañon, and cuts a deep channel into the quartzite nucleus of the mountain. Douglass Creek and French Creek rise in the eastern part of the mountain, and run west through its entire southern half, and enter the North Platte.

The whole central portion of the mountain is composed of quartzite. It presents the largest development of this remarkable formation that I have seen in any of the mountains of Wyoming, Colorado, or Utah. Along French Creek all the mountain ridges and peaks are a solid mass of quartzite. Even the highest snow peak, in its central part, is a mass of quartzite, presenting in the distance the appearance of white marble mountains. I examined this mountain in the present month—September—but had not time, after reaching these quartzites, to ascertain to what extent they are mineral-bearing.

Old gold prospectors have been hunting it over for gold veins, and found none. The quartzite formation is not gold bearing, but yields the richest veins of "free milling silver ore," consisting of the chlorides and sulphides of silver, with a small trace of gold. Judging from the fine, agate-grained quality of much of the formation, I infer that it must contain rich veins of silver ore, equal in value to those found near Parley's Park, and in the Tintic and Star districts of Utah, and also at Pioche in Nevada, where this formation is marvelously rich in silver ore veins. An old Nevada silver miner has found a vein of this ore in the coarser quartzites in Rock Creek Cañon, and is preparing to remain and work it through the coming winter, being encouraged by a favorable assay of his ore.

This mountain will be carefully and intelligently prospected for silver next season, for even the black and gray gneiss belts alternating with syenite, which skirt its circumference, contain veins of argentiferous galena, with some gold.

The Medicine Bow, like the Uintah range, is heavily timbered, though most of the timber is more suitable for railroad ties and telegraph poles, than for sawing purposes.

*The Sierra Madre Range.*—The cluster of mountains forming part of the continental divide, between Bridger's Pass, south of Rawlins Spring station and the North Park of Colorado, appear to have no well defined name on any maps that I have seen.

Some have called them the "Uintas" of Wyoming; others have termed them the Grand Encampment Mountains, because the timber men of the Union Pacific Railroad obtained, years ago, bridge timber and ties on Grand Encampment Creek, which heads in these mountains, west of the North Platte, and gave the name of "Grand Encampment" to them.

But they form a portion of the crest of the continental divide, and are therefore really part and parcel of the Sierra Madre of the Rocky Mountains.

The Wind River chain ought also to be named Sierra Madre.

In looking southwest from the crest of Elk Mountain, you have a fine view of this portion of the Sierra Madre, with snow-capped peaks the year round, and spreading out over 30 miles in width east and west along the southern boundary of Wyoming. They form a part of the northern and western rim of the North Park of Colorado, and continue to trend southward on the west side of North Park, forming a continuous but circuitous rim between the North, Middle, and South Parks, and continue on, as the water-shed of the Rocky Mountains, through New Mexico.

From its western slope the branches of Little Snake River take their rise, running southwesterly into Bear River, (of Colorado.) Considerable gold has been found in the valley of this stream, showing that the range is gold bearing.

The south boundary and third standard parallel of Wyoming will cross this mountain in its widest part, say at least 30 to 40 miles. It is well timbered with pine and spruce, and its central portions embrace gold and silver bearing rocks.

*The Seminoe Mountains* derive their name from one of Fremont's old guides of that name, who led him out of Sweetwater Valley, through "Seminoe Pass," (now frequently called "Whisky Gap,") and thence southeastward to the Parks of Colorado.

These mountains lie between Seminoe Pass and Platte River, twenty miles in length, and fifteen miles south of Sweetwater River at Independence Rock. They trend westerly, and the range continues nearly to the head of the Sweetwater, at South Pass, and takes the name of the river west from Seminoe Pass.

These mountains are composed of black, gray, and red gneiss. They appear to be quite metalliferous, and already yield both gold and silver. That portion east of Sand Creek constitutes the "Ernst Mining District," so called from a member of Generals Bradley's and Thayer's exploring party, who discovered a gold quartz vein there last



year. That portion of the range west of Sand Creek now constitutes the "Ferris Mining District," and several promising silver veins are being worked there this season.

The highest peaks in this range are 10,500 feet in altitude—Bradley's Peak 9,500 feet, and Young's Peak, close to the latter, over 9,000 feet.

*The Big Horn Mountains.*—These are the largest, longest, and most conspicuous mountains of Wyoming. Their shape much resembles that of a horseshoe, the open space on the west being closed by the Snowy Range, which runs northward from the Wind River chain, and divides the Yellowstone Park Basin from that of the Big Horn Basin on the east.

They almost encircle the Big Horn Basin; the southern rim being severed by the cañon of Wind River, the northern one by the Big Horn River Cañon, over thirty miles in length, which commences near the northern boundary of Wyoming, and passes into Montana; the northern bend of the mountain lying within that Territory.

They are the production and mere extension of the same upheaval forces that sent up the Laramie and Medicine Bow Ranges on the south, partially dying out north of the Red Buttes, yet clearly showing an anticlinal axis from the latter point, northwest, to the nearest point of the Big Horn Range. Here the internal forces appear to have divided, one branch trending on in its northwesterly course to the Big Horn Cañon, the other striking off westerly to join the Wind River Range at the head of Wind River.

They present the same geological characteristics as the other mountains of Wyoming, and are known to be gold bearing, gold having been found about the heads of Clark's Fork and Powder River, which rise on their outer rim. Gold is also known to exist on Gray Bull River and other streams, which rise from the inner rim, and flow into the Big Horn River. The coal measures are also found skirting large portions of these mountains, both within and without their circumference. They are well timbered in their higher portions.

They are destined to become an immense store-house of wealth to the people of Wyoming, when the wild and warlike Sioux Indians shall cease to occupy them as hunting grounds, and be concentrated on suitable reservations at a safe and proper distance from them.

*The Wind River Range.*—This range forms the continental water shed or divide between Idaho and Montana, and trends southeast into the northwestern part of Wyoming, terminating at the old South Pass and the head of the Sweetwater.

It is the *Sierra Madre* of that part of the Rocky Mountain chain, and though it dies out at the South Pass, it forces an anticlinal across the interior plain, for over a hundred miles, to the railroad at Creston and Separation.

The same line of upheaving force continues southeasterly from the railroad, as is seen in the direction of Bridger Pass and the North Park of Colorado, by the mountain we have named *Sierra Madre* on the plat accompanying this report.

The dip of the tertiary rocks westward from this low anticlinal has enabled the railroad company to obtain a fine flowing artesian well, of six-inch bore, at a depth of 590 feet, at Washakie, only fifteen miles west of Creston, the news of which result reaches me while penning this article.

Fremont's Peak, in latitude  $43^{\circ} 30'$  north, longitude  $110^{\circ}$  west from Greenwich, is 13,000 feet in altitude, and much the highest part of this range, constituting, in fact, the initial point of three grand water sheds, from which flow branches of the Columbia, the Colorado, and Yellowstone Rivers.

Green River heads near this peak, and drains an area of over fifteen thousand square miles, while the affluents of the Yellowstone drain an area of over twenty thousand square miles in Wyoming.

The geology of this mountain is quite similar to that of the other mountains of the Territory, an anticlinal of metamorphic rocks as far to the northwest as the heads of Green and Wind Rivers. Beyond this they are more igneous in character, showing volcanic action in many parts. This side of Fremont's Peak the branches of Green River cut down through the metamorphic strata, and bring down gold into the beds of the branches. On the east side of the mountain, around South Pass and Atlantic City, a large area of black gneissic rock is exposed, ramified with veins of quartz, in which the "Sweetwater Gold Mines" are found.

Many productive veins are already worked there, which bid fair to rival those at Central City, Colorado. But, like those, the free gold decreases in depth, and soon the gold will be so enveloped in gangues of quartz, and sulphuret of iron and mundic, that it will require the furnace process to extract it, (after milling,) as practiced with the Bob Tail and Gregory ores at Central City.

*The Snowy Range.*—This forms the eastern rim of the Yellowstone Park, and divides it from the Big Horn Valley on the east. It is an arm of the Wind River chain, trending off northwardly toward the Yellowstone River below the falls, and part of which turns to the northeast to join the Big Horn Mountain.

It is described as chiefly of volcanic origin, and, as Clark's Fork heads up against it, and furnishes gold placer mines, the formation must be gold bearing.



## UINTA MOUNTAINS.

This range lies along the southern boundary of Wyoming, extending from Green River west to the Wasatch Mountains, over a hundred miles. Its trend is almost due east and west, and its general course straight. The main portion of the mountain is within Utah, though, for practical purposes, it is a Wyoming mountain. Its northern face or slope is approachable only from Wyoming, and this part is heavily timbered, portions of which cross the line into this Territory.

Judge Carter, of Fort Bridger, has applied to Congress for permission to build a railroad from the Union Pacific, up the valley of Smith's or Black's Fork, to these forests of timber. Such a road would greatly subserve the public interest, not only in the timber department, but by giving easy access to the central part of the mountain, which will doubtless prove to be prolific in veins of gold and silver and other valuable mineral ores.

Four considerable streams rise in the axis of this mountain, and run down its northern slope into Wyoming, to wit, the Bear River of Salt Lake, and Black's, Smith's, and Henry's Forks of Green River. The latter stream rises by three forks, the east one having its source at the base of Gilbert's Peak. The valley of this branch incloses one of the most beautiful of a series of mountain lakes which exist in this vicinity, this one having an altitude of 11,000 feet.

The crest of this mountain furnishes several snow clad peaks of great beauty, the white domes of which can be seen through all the summer months from the railroad, though fifty to sixty miles distant. Gilbert's Peak, at the head of Henry's Fork, rises 13,182 feet; Cox's Peak, farther west, rising like an immense dome, is 13,250 feet; and Dawes's Peak, still farther west, rises 13,300 feet.

Yet farther west is Logan's Peak, at the head of Bear River, rising 13,500 feet. The limit of arborescent vegetation on most of these interior mountains is 11,000 feet. Thus the snows on the north side lie upon 2,500 feet in height of bare surface, and not hidden from view by the dense forests which often cover the mountain up to the arborescent line.

Near Logan's Peak are open spaces where one can obtain some of the grandest views on the continent. Looking west you have the valley of Bear River at your feet, while over the summits of lower ranges the Wasatch Mountains, east of Salt Lake City, and along the high crest between Parley's Park and the Cottonwood Cañons, can be clearly seen fifty miles distant; also, the snow-capped summits at the head of the American Fork, near Provo Cañon, and the several snow peaks along the range as far south as "Mount Nebo," Utah, which is so prominent in the distance southeast of Utah Lake. Looking north, with your large field glass, you behold in the far distance the snow clad mountains of the Wind River (Sierra Madre) Range, extending along the horizon in the vicinity of Fremont's Peak, at least one hundred and eighty miles away. To the northeast you have spread out before you the plains of Green River Basin to the continental divide at Creston, over 200 miles; and on the east loom up the snow clad peaks west and north of the North Park of Colorado, not less than one hundred and seventy-five miles distant. No one, except the beholder who is familiar with the topography of these distant points, and is well assured that no *prominent* object intervenes between him and the grand one in view, can possibly appreciate the astonishing extent of country over which the eye, by the aid of a good field glass, can travel through the pure, clear atmosphere of these high altitudes.

Having spent much of the late month of July in the mountains of Utah, and especially in the Wasatch, southwest of Parley's Park and east of the Cottonwood Cañon, in company with Mr. Henry M. Rogers, of Boston, with the western end or curve of the picturesque Uinta Mountains in full view, forty miles eastward, we resolved to visit them on our way homeward.

Even at the distance of thirty to forty miles we could see, with our field glasses, that the trend and dip, and even the general geological characteristics, were probably the same as those of the eastern spurs of the Wasatch which we had been examining, and which are found highly mineral bearing; and our convictions were strengthened by the tidings brought us by prospectors for silver from those mountains, who brought in specimens of rich silver ores obtained from the quartzite formation there. The intervening and comparatively open space here between the Wasatch and Uintas is made up of valleys, meadow parks, and table lands, where rise the several branches of the Provo and Weber Rivers.

Accordingly we returned by Salt Lake and the Union Pacific Railroad to Fort Bridger, where, through the politeness of Judge Carter and Major Lamotte, commandant, we were enabled to visit the Uintas. It was not necessary to penetrate the axis of the mountain to be convinced that it was largely composed of an enormous formation of quartzite, for all the valleys of the streams leading from it were strewn with boulders of the several forms of this formation. Experience has shown that this formation produces veins of silver ore of marvelous richness, and free from the baser metals known as "free milling ores."

The quartzite formation appears to increase in thickness towards Green River. Dr.



Hayden says, "I find it difficult to account for this tremendous development of quartz with gneiss at the eastern end of the Uinta Range." Again, he says, "So far as the physical evidence is concerned, the practical miner would pronounce the quartz range of Green River (at Brown's Hole) one of the richest localities for gold and silver in the West." Lone Star lode at that place is 25 feet wide between walls composed of gneiss. In the same locality the red quartzites present an enormous thickness.

The scenery of this mountain is both grand and picturesque. Dr. Hayden says, "It has sometimes been called the 'Alpine Mountain of America,' though we miss the vast masses of snow and the glaciers; but in an artistic sense no range that I have seen on the continent can compare with it in beauty. There is far more of rugged grandeur about the Wind River, the Sierra Nevada, or the Coast Ranges; but in none of them is there such simplicity of structure, nor the contrast so pleasing to the eye. The rocks upon the divide exhibit the more remarkable architectural forms, as cones, castles, cathedrals, pyramids," &c., &c.

#### TIMBER RESOURCES.

This subject was fully noticed in my report of 1870. But a stranger passing over the Union Pacific Railroad through this Territory for five hundred miles, would naturally infer that it contained no timber, for there is scarcely any to be seen from the road. It exists, however, in great abundance from twenty-five to one hundred miles from the railroad; and can be brought to the road very readily from the heads of the streams which cross it. The Big Laramie and its branches head in great forests of timber in the Medicine Bow and Colorado Mountains, and probably a million of ties per annum are floated down to the railroad at Laramie City, and the village of Wyoming.

The mountains north and west of Laramie Peak contain large quantities of fine timber, of larger size than that of the Medicine Bow Range, which is literally covered with timber.

The mountains which flank the North Platte, all the way to its head in North Park, are largely covered with timber, which can be floated down the Platte to the railroad at Fort Steele. The head branches of Green River rise in the southwest face of the Wind River Mountains, in the midst of extensive and valuable forests, which can be floated down to the railroad at Green River station.

Carter station, further west, is another point of large supply of lumber from the Uinta Mountains, which contain immense bodies of timber. Judge Carter and brother, of Fort Bridger, have three steam saw-mills in these forests along the northern base of the Uintas, which are capable of furnishing a large supply of lumber. They frequently use several hundred yoke of oxen in the hauling of lumber from their mills to the railroad. I saw about twenty wagons in one train, drawn by six yoke of oxen each, hauling lumber to the railroad.

Bear River is also the channel for a large supply of lumber, through which stream it floats from the large forests in the Uinta Range, to Evanston, on the railroad, where there is a steam saw-mill.

The Big Horn Mountains are well supplied with forests of timber, which will become very valuable when a railroad shall be constructed along the eastern base of the mountains, from Cheyenne to Montana.

The timber in all the mountains differs very little in variety, consisting principally of pine, cedar, fir, and hemlock; but there is a greater proportion of large size north of Laramie Peak, and in the Big Horn and Wind River Mountains, than in the mountains south of the railroad.

#### WATER POWER—STEAM MILLS.

The Territory possesses a large amount of water, but very few, if any, water power mills.

There is plenty of water power near the sources and at the lower cañons of the North Platte and the two Laramie Rivers. Green and Bear Rivers also afford a considerable water power near their sources, and Wind River, Big Horn, Tongue, Powder, and Cheyenne Rivers present a reasonable amount.

All these water power privileges will be appropriated as the country settles up, and side railroads penetrate to their vicinity.

At present we have none but saw mills and mineral stamp mills, which are run by steam. Several steam saw mills are operating in the Uinta Mountains, and owned by Judge Carter, of Fort Bridger; one at Evanston on Bear River; two or three near the Sweetwater gold mines, in the forest of the Wind River Range; several in the Medicine Bow Mountain and the Laramie Range, and one or two between Laramie Peak and Fort Fetterman, in the fine forests of that region.

There is room for twice as many more as now, and young men familiar with the business could not fail to make it profitable.

#### CLIMATE AT CHEYENNE, WYOMING.

In my report of 1870 I gave the annual mean of temperature from observations taken



at 3 p. m., which showed it to be  $55^{\circ}.78$  for the year. The rain-fall for that year, melted snow included, was 12.73 inches.

Last year, 1871, I found from daily observation, at 6 a. m., 2 p. m., and 9 p. m. the mean temperature for eleven months (October, 1870, not included) to have been  $47^{\circ}.33$ . If October had been obtained, and the observations taken at 9.44 a. m., instead of 6 a. m., the annual mean would have no doubt shown  $50^{\circ}$ , or a trifle more. The rain-fall of the same eleven months of last year was only 8.97 inches, it being a year of unusual drought here, the same as in all the country west to California.

For the twelve months ending with the present one (September) the mean temperature for the year shows to have been  $44^{\circ}.20$ , and the rain-fall 14.15 inches. These "means" of temperature and rain-fall are politely furnished me by Mr. Asa C. Dobbins, the reporter of meteorology for War Department telegrams, at Cheyenne. The water from rain fall and melted snow is about the average of several years taken together along this part of the base of the Rocky Mountains, though I think the rain fall at Fort Laramie, ninety miles north of Cheyenne, has been shown in former years to have been about 18 inches.

We have here scarcely a drop of rain fall from October to April, and the snows are so light and dry that it is estimated to take 12 inches of snow to make one of water.

The winter of 1871-'72 was known here, and in the mountains farther west, as a remarkable one for the amount of snow that fell. The old mountaineers, of over thirty years' residence here, inform me that during that period they have witnessed far more snow fall and cold weather every eighth year than during any of the intervening years. My own observation at Saint Louis, for more than thirty years, confirms their statement, for a cold and snowy winter here in the mountains is found to extend all the way over the plains to Missouri.

The winters of 1855-'56, 1863-'64, and 1871-'72 were more remarkable, both here at the mountains and in Missouri, for cold weather and greater snow fall than any others between those periods.

Whether this regular return of severe winters will continue I cannot predict, but I have personal recollections that they have occurred in this manner for the past quarter of a century.

The following table shows the mean temperature and amount of rain fall for each month of the past year.

It also shows that from October to May, inclusive, the amount of water obtained from the snow fall, when melted, amounts to only 3.34 inches. This would give not quite  $3\frac{1}{2}$  feet of snow fall during those seven months. Not quite a quarter of an inch of this was rain-water; the balance was from melted snow.

Last winter was noted for its remarkable snow blockade of the railroad on the Laramie Plains. Those plains are 1,000 to 1,200 feet higher in altitude than Cheyenne, and more snow fell there last winter, but not enough more to account for the severity and duration of the blockade.

In addition to the larger amount of snow, they had at the blockade a more rolling surface, a thousand feet higher altitude, a greater degree of cold, and far stronger winds, which caused the snows to drift constantly between each storm, and fill up every railroad cut, ravine, or uneven place.

The great improvements made this summer along the blockaded part of the road will obviate the chief danger from blockading the ensuing winter, even if as much snow should fall as last winter. East of the mountains, and for some distance east of Cheyenne, very little blockade occurred.

Taken all in all, the climate throughout the entire year is as healthy and pleasant and invigorating as can be found almost anywhere on the continent.

The mean temperature for the past year ( $44^{\circ}.20$ ) is lower than former years, caused no doubt by the greater fall of snow in winter, and of rain the past summer.

For the causes of the mild winter temperature of this latitude in these mountain regions, I refer to explanations given in my last annual report.



Monthly meteorological record for the twelve months ending September 30, 1872, compiled from the records of the United States signal station at Cheyenne, Wyoming.

Month.	Mean barometer.	Mean temperature, 3 daily observations, 9.44 a. m., 2.44 p. m., 9.44 p. m.	Prevailing winds—from what direction.	Total number of miles traveled by wind.	Amount of rainfall in inches and decimals.
1871.	In.				
October .....	29. 419	46°	West .....	8, 004	0. 245
November .....	29. 384	28° .9	Northwest ..	7, 940	0. 66
December .....	29. 418	28°	West .....	9, 830	0. 16
1872.					
January .....	29. 929	26° .6	Northwest ..	8, 743	0. 02
February .....	29. 856	30° .95	West .....	8, 659	0. 27
March .....	29. 917	33°	Northwest ..	6, 935	0. 38
April .....	29. 876	38° .3	West .....	8, 639	1. 61
May .....	29. 990	52°	North .....	7, 300	1. 99
June .....	30. 041	61° .5	West .....	6, 660	1. 84
July .....	30. 098	64° .5	....do .....	6, 675	3. 90
August .....	30. 116	65° .1	....do .....	5, 786	2. 05
September .....	30. 038	55° .6	Northwest ..	5, 975	1. 03

Synopsis for twelve months.

Mean barometer, inches.....	29. 84
Mean temperature.....	44° .20
Total amount of rainfall, inches .....	14. 155
Total number of miles traveled by wind.....	91, 146

AGRICULTURE.

That portion of Wyoming between Nebraska and the mountains is as well adapted to purposes of agriculture as Colorado. The country slopes northward from Cheyenne to the Yellowstone River, and all the valleys of the numerous streams which enter this region from the mountains are suited to the production of small grains, and highly adapted to the raising of all kinds of vegetables. Cabbages grow to an enormous size without artificial manures. From two hundred to four hundred bushels per acre of the best quality of potatoes can be raised, and turnips, parsnips, and all other garden vegetables do equally well. The soil is remarkably adapted to the large yield of wheat, barley, and oats, because of its favorable combination of materials which make up a good argillaceous and calcareous soil, with the addition of potash and gypsum, which are derived from the decaying saliferous and feldspathic rocks of the mountains.

Our seasons are short, and planting and sowing should be done by the 1st of May, or earlier if possible. Taking the seasons generally, it is necessary to resort to irrigation. This is easily accomplished in the valleys of all the streams, by taking the water into sluices and spreading it out wherever necessary, as is so successfully done by the Mormons in the Salt Lake valleys.

The adjoining table lands, though better suited for grazing purposes, will to some extent be irrigated and brought under cultivation in coming years, by means of artesian wells, as now practiced quite extensively in many parts of California.

But, after all, the chief secret of success lies in *deep* plowing. No crop should be planted without first subsoiling the ground. In this way far greater moisture is retained during [a given period; and during a season like the past one, irrigation would not become necessary in many of the low valleys.

Here in the valley of Crow Creek an enterprising merchant of Cheyenne (Mr. Pease) has raised a crop of fine potatoes this season without irrigation; and back of this city, on still higher land, better potatoes have been raised this season without irrigation than are usually raised in Missouri.

Large crops will be raised in the valleys of Chugwater, Sybille, Big Laramie, and the North Platte, when they come to be settled. Only a few stock growers are now occupying portions of these desirable valleys.

SUMMER AND WINTER GRAZING.

I do not propose to repeat what has been said upon this subject in my two preceding annual reports. The confidence of the numerous stock and sheep growers, as well as



my own, has not been materially changed because of the severity of last winter. It was an exceptional winter, such as occurs only at intervals of several years. Along the eastern base of the mountains for more than a hundred miles in width the advantages for growing stock and sheep are nowhere surpassed on the continent.

All herds of cattle within this limit passed through last winter without shelter, or hay or grain, and without greater loss than would befall herds of the same size in the States, with hay and shelter.

One flock of three thousand sheep just introduced from the States, passed through the winter here without hay, or grain, or shelter, and but few were lost until the snow storms of the early part of April, which came from the east, and were therefore very damp. This adhered to the backs of the sheep, and in melting had the effect to chill and prostrate them, and many died in consequence.

This shows the importance of some shelter, as well as prepared food, during the continuance of the storm; for there is always much wind with the snow fall, and large snow drifts follow, which prevent sheep from reaching the grassy benches and table lands until the storm ceases and some aid is given to enable them to pass through or around the drifts in the valley where they are herded at night. Mr. Maynard, a very enterprising and successful grower of sheep and stock, eighteen miles south of Cheyenne, provides shelter and some hay for his sheep, to be used during these storms, and he lost comparatively none last winter. They must have shelter during the snow storms, and careful herders to attend to their needs at those critical times.

On Crow Creek, near the mountains, (near where the three thousand sheep spoken of were herded,) a herd of seven hundred head of cattle, and some horses, passed through the storms of last winter without shelter, or any food except the cured nutritious grasses of the plains, and no loss to speak of was experienced. This herd is owned by Judge Carey (of the United States court of this Territory) and his brother. They, with the aid of careful herdsman, kept their stock well together and moved them from place to place as circumstances required, and were very successful.

Mr. Iliff of this city, whose herds numbered about twelve thousand head last winter, and the same now, carried them through without shelter or feeding, and lost very few that were herded along the valley of Crow Creek, between here and its entrance into the South Platte.

The success of stock growing in this region has caused Cheyenne to become a stock market of large and growing importance. The great herds required for Utah, Nevada, Idaho, and Montana markets, are brought here from Texas and sold to the dealers from the Territories west of this point. Mr. Bush, who lives at the old stage ranch at the crossing of Rock Creek, has recorded nearly one hundred thousand head of cattle that have passed west this season, along the old stage road across the Laramie Plains. This will serve to show how rapidly this business is increasing, and how vast it must become within the mountain plains and valleys within a very few years.

#### ARTESIAN WELLS.

The Union Pacific Railroad Company are sinking a number of these wells this season at stations along the line of their road, principally in Green River basin, where water along the road has been very scarce.

The *first* well undertaken was at Point of Rocks, and was abandoned at 1,012 feet in depth without obtaining flowing water. Water rises in it, however, within seven feet of the surface, where it affords a sufficient supply for a No. 9 Knowles steam pump, which is used to fill the railroad tank. The bore of the well is  $4\frac{1}{2}$  inches. The water is sulphurous, but exposure to the atmosphere soon dislodges the sulphur.

The *second* well was sunk at Rock Springs station, a 6-inch bore, and is 1,187 feet deep. The water flows or rises 50 feet above the surface, but contains too much alkaline matter to be valuable for locomotive use. The boring for this well cut a number of coal-veins, (eight or ten,) the depth and thickness of which I have not learned.

The *third* well is at Bitter Creek station, is 700 feet deep, furnishing abundance of good water, and overflows a tank 30 feet high. It will rise 70 feet above the surface of the ground. This is an important success at a point where there was no surface supply of water for a considerable distance.

The *fourth* well is at Washakie station, only 15 miles west of Creston, at the continental divide. The bore is 6 inches. Found flowing water at 499 feet in depth, but larger quantities at 590 feet, and at 610 feet the well was discontinued, as the water supply was abundant.

The *fifth* well is in progress at Separation, and is now 96 feet deep.

The tertiary strata dip west from Separation, toward Green River, and hence it is natural that flowing wells should be obtained at proper depths.

For the foregoing information relating to these wells, I am indebted to A. D. Pierce, esq., the enterprising and intelligent manager of this work for the railroad company.

Congress, in its wisdom and liberality, made an appropriation at the last session of \$10,000 to be expended in boring an artesian well at Fort D. A. Russell, three miles from



Cheyenne, and twenty miles from the base of the mountain. We learn that work on this well is soon to commence. It will no doubt prove to be a great success, for it ought to give a large supply of flowing water within 1,000 feet in depth, and possible at 500 to 700 feet. The rock strata have about the same dip here from the mountain as they have at Washakie, where 610 feet in depth gave an abundance of flowing water.

If this attempt at Fort Russell proves successful, it will inaugurate a new era in this line of important improvement along the eastern base of the Rocky Mountains. It will give the necessary impetus to this mode of obtaining water for irrigating portions of the plains.

It may possibly cut valuable coal veins, if it should have to go 1,000 feet for water; for I can see no reason why coal should not exist at the bottom of the tertiary formation here, as elsewhere north and south and west of us.

#### OIL SPRINGS.

Petroleum springs were discovered a few years since in the vicinity of Bear River, in Western Wyoming. More than 20,000 acres, in parcels of 160 acres each, were surveyed and located by private parties; but no one has done much toward developing their value, except Judge Carter, of Fort Bridger. He expended considerable money, and obtained an encouraging quantity of crude oil. He at one time thought seriously of erecting refining works, but has not yet done so.

A considerable quantity of crude oil flows from these springs constantly, but in what amount I am not advised. It rises out of the tertiary formation, at the base of which the coal measures lie. It is not decided by geologists whether the oil is derived from vegetable (coal) or animal remains. At this locality it flows out above the coal line; while in the Arkansas Valley there are oil springs found in cretaceous rocks, which lie below the coal beds.

There are also oil springs in the Wind River Valley; one on the Little Popo-agie, about 25 miles north of the Sweetwater gold mines; and one on Little Wind River, about 40 miles westerly from the former. They are easily set on fire with a burning taper.

Near Red Buttes, a short distance north of the old emigrant road, are two or three more of these oil springs of considerable size and strength; so much so that they were laid claim to in those days, and the oil furnished to emigrants at a large price.

There are, no doubt, many of these springs scattered about the mountains, and which may rise into profitable notice in due time.

#### SODA AND HOT SPRINGS.

Judging from the geology of the mountains of Wyoming, it is reasonable to suppose that soda springs, hot and boiling springs, and sulphur and iron springs, will be discovered in abundance at no distant day. Dr. Hayden describes a valuable soda spring, twenty miles west of Fort Bridger, on the overland stage road, as "yielding the most delicious water, not differing materially from that of the soda springs in the valley of the Fontaine qui Bouille, at the eastern base of Pike's Peak." I drank, the present month, of the water of the springs at Pike's Peak, and, if the spring near Fort Bridger affords water as fine and pleasant to the taste, it must be quite valuable, so near the Union Pacific Railroad.

Bear River Valley, in Western Wyoming, is already noted for its numerous mineral springs. There is a hot spring in the valley of the Sweetwater River, forty miles east of Sweetwater mines; also one fifteen miles westerly from Fort Laramie, on the lumber road to Laramie Peak. Both of these yield boiling hot water.

#### COAL MINES.

For a detailed account of these, I refer to my last two annual reports, and to the several reports of Professor Hayden upon the coal beds of Wyoming; and especially to the able report of Clarence King, in his third volume of the *Geology of the Fortieth Parallel*, in which he gives a most extended and scientific account of the coal deposits of the Weber and Green River Basins—the very best I have seen on the subject.

Wyoming is especially fortunate in the possession of these extensive coal deposits; for without them the Union Pacific Railroad could not have been a success, either to the company or the nation. This coal supplies the principal part of the fuel used by the Central Pacific road and the towns along it, on this side of the Sierra Nevada; and all the fuel to operate the one thousand and thirty-two miles of the Union Pacific Railroad, and supply the towns along its whole length. It will, no doubt, be used for rolling mill purposes, and the smelting of the large bodies of iron ore which lie within the Territory. The Rock Springs coal is found to be the best of any mountain coal for the manufacture of gas, and is used by the Denver Gas Company in preference to any they have yet tried.



It is found much nearer the surface in the Laramie plains than in most parts of the Green and Bear River Basins, and it occupies not one-half the area in the former locality that it does in the latter; yet it will not be exhausted in the Laramie plains for many years to come.

It is known to exist also in the Wind River and Big Horn Valleys, where it will prove of great advantage in the future working of gold and silver mines in that part of the Territory. Coal beds also skirt the eastern base of the Big Horn Mountains, and are found outcropping against the Laramie Range near Fort Fetterman.

It is a mooted question whether it will be found to exist at the bottom of the tertiary rocks which skirt the Laramie Range from Fort Fetterman to Cheyenne, a distance of about 140 miles. There is no exposure of the coal series along this line, such as is seen at the Boulder mines farther south, and if coal has been deposited along this ancient shore of the tertiary sea, it will be found only by boring for it. We have confidence that it will be found to exist at the bottom of the tertiary rocks along this base of the mountain, and Colonel T. E. Sickels, general superintendent of the Union Pacific Railroad, has assured me that he will make the experiment of boring for it in the valley of Crow Creek, near the Laramie Mountains, as soon as one of the engines and sets of tools now engaged in sinking artesian wells can be spared for the purpose.

If successful, it will secure to Cheyenne both rolling mills and iron furnaces, and make her the great manufacturing town along the eastern base of the Rocky Mountains. What adds to my confidence in the existence of coal north and west of Cheyenne, is the local outcrop fifteen miles southwest of here, known as Moore's coal banks.

#### IRON MINES.

This subject has been fully treated in my former reports, and in the reports of Doctor Hayden. I will add only a few general remarks on the subject of iron ores.

The great Iron Mountain extends north and south through the whole of section 27, township 19 north, range 71 west, though it extends much farther north and south, and nearly on the line of the true meridian, but crops out only at intervals along its course.

The great vein is cut through by the principal branch of the Chugwater, and is located within the mountain ridges, about one mile from the eastern base. It lies northwesterly, and about forty-five miles distant from Cheyenne; its base at the Chugwater gorge being only 450 feet above Cheyenne in altitude.

It is a black, crystalline "magnetite," such as occurs in the Laurentian rocks of Canada, and contains 23 per cent. of titanium, according to the few specimens analyzed. This, we are informed, will not injure the quality of the iron, but renders the fluxing of the ores much more difficult.

This objection can probably be obviated by mixing the ores with brown hematite or the red oxide ore, which can be procured in abundance; the latter at Rawlins and in some parts of the Laramie Mountains. There are some valuable parallel deposits west of the Iron Mountain, upon the broad table of the Laramie Range; also north on the branches of Sybille Creek. There is a good natural grade for a railroad from Cheyenne to the Iron Mountain, and it is hoped that one will be commenced before the close of another year.

There is an extensive deposit of red oxide iron ore within three miles of the railroad at Rawlins Station. It is being shipped now in large quantities to New York, and some to Boston, and manufactured into "mineral paint," for which use it is acquiring considerable reputation. It is also shipped by cars to silver furnaces near Salt Lake City, and used as a valuable flux for some of the refractory silver ores. I saw large quantities of it this summer at the "Saturn" silver furnaces, sixteen miles south of Salt Lake City, where it is used wholly as a flux.

There are considerable deposits of hematite and limonite ores southwest of Cheyenne, and near the coal mines at Separation and Evanston, which I have not examined. They are said to be abundant.

#### GOLD MINES.

Several valuable gold mines have been discovered in the black gneissoid formation in the Sweetwater district, around South Pass and Atlantic Cities, and at Camp Stambaugh. Some of these have already acquired considerable depth, and have paid their expenses from the surface to a depth of nearly 200 feet; and also paid for the engine upon the mine, and a mill of ten stamps.

I visited and examined those mines last year, and gave a pretty full and encouraging report of their prospective value, when worked with capital and proper mining experience.

I saw that the great danger of discouragement laid in the fact, not well understood by the ordinary miner, that *free* gold exists in larger quantities at the outcrop of the vein on the surface, where all pyritous matter has been rusted and crumbled away from the gold, than farther down in the vein, where the gold is so intimately combined



with the compact and undecayed pyritous gangue of the vein, that only a small portion of it can be separated and saved by the stamping and amalgamating process. I warned the owners, who did not readily comprehend the state of the case, of the effect such a change would have upon them.

I saw at the dump of the Cariso lode large quantities of fine grained vein stone, impregnated with pyritous matter, that had been cast aside as valueless; analysis proved it to contain \$70 per ton in gold. It was then run through the stamps and amalgamators, and \$15 per ton free gold saved, and the tailings taken care of for future treatment in roasting and smelting furnaces, which will obtain all the gold, even if in *chemical* combination with the pyritous matter.

Mr. J. W. Anthony, who has had years of experience with the mines of Sweetwater, has kindly furnished the following note in regard to their present condition:

“SWEETWATER MINES, September 22, 1872.

“SIR: Yours under date September 26, 1872, is at hand. In reply, as to the work in Sweetwater mines this season, I can say there has been considerable work done considering the number of men at work. Some new gulches have paid very well, from \$5 to \$20 per day to the man. There are thousands of acres that will pay \$10 per day to the man if he only had the means to build ditches to convey water on to the ground. All of the lodes worked this season have paid well. The old ‘Miner’s Delight’ run up to its old mark, \$50 to \$100 per ton. The ‘Buckeye,’ with its mammoth amount of quartz on the surface, has paid its way from the top to its present depth, 180 feet, with hoisting works, pump, and 10-stamp mill. The ‘Cariboo’ was purchased by Chicago men, Messrs. Hotelling, Crikter & Co., and mill erected, and then laid over to speculate on at a distance. The time run out that constituted abandonment in law, and then the mine was taken possession of by parties living in the country, who have been working the mine, and crushing the quartz, and paying well. The quartz yields on an average of \$29.50 per ton. All the lodes that have been worked have paid well, much of the lode work being stopped on account of the water below; having had an extra amount of snow last winter the water was higher than usual, and the parties unable to buy pumps of sufficient capacity to keep the mine dry. There are two 20-stamp mills going up now at ‘Miner’s Delight,’ which will be sixty stamps at work there the coming winter: 20 stamps on the ‘Miner’s Delight,’ 20 on the east end, called ‘Young America,’ and 20 on the Hartley lode. Work will be resumed this fall on the ‘Dyer lode’ and several others, among which is the Perkins end of the Loles & Perkins. The mining interest is cried down by the Government officials located in the mining section; and the parties trying to show the country as it is, by labor, have a great many difficulties to labor under, the chief of all being that everybody is poor and only work that vein that will pay all expenses from the grass roots down. Another difficulty is that most all of the miners have very little experience, and they work and try, and learn by experience, but they do not know how to take advantage of a good position, even when presented to them. The mines about South Pass are lying idle, being owned by foreign capitalists, who are a curse to Sweetwater district.

“Very respectfully,

“JNO. W. ANTHONY.

“DR. SILAS REED, *Surveyor General of Wyoming.*”

Not half the gold veins in this district have been discovered, and now that the Shoshone reservation is to be cut off on the south, and the valleys of Little Wind River and Popo-agie are to be settled by white men for agricultural purposes, the miners will be safe to prospect for veins nearer the mountains west and northwest, where the veins will no doubt be found richer as the workings move up nearer the granitic nucleus of the Wind River Mountain. The several gulches have afforded a flattering amount of placer gold this season, because of the increased amount of water from the unusually large snow fall of last winter.

The other discovered gold mines of Wyoming are situated in the Medicine Bow and Seminoe Mountains.

Those in the first named locality are known as the Last Chance placer diggings, and are at the head of Douglass Creek, in the south end of the Medicine Bow Mountain. There is a belt of gneissoid rocks along the eastern base of this mountain which contains gold veins, but the veins are so overlaid with *débris* at the point named that they have not yet been discovered.

West of this belt of metamorphic rocks, the whole central part of the mountain is composed of quartzite, which bears *only* silver veins, not yet discovered.

A cluster of gold mines has been discovered within the past year, in that part of the Seminoe Mountains, west of Dewees’s Pass, at the base of Young’s Peak.

The principal one is known as the Ernst lode, in honor of the discoverer. A shaft has been sunk on this lode, and a tunnel run from the north side of the ridge to cut the vein. I visited the mine in August of the present year, and found two promising looking veins already cut by the tunnel, but there was doubt whether the main vein



had been reached, as the shaft was only 18 to 20 feet deep, and the precise dip of the lode not ascertained.

Some of the gold quartz of the vein had been sent to Colorado to be crushed and amalgamated, and the yield was over \$20 per ton, and quite encouraging to the owners, who have since made arrangements to have a stamp mill erected there as soon as possible.

There are several other promising discoveries there, known as the Independent, the Mammoth, the Murdock, the Everett, &c., which have not yet been fairly tested.

Other gold veins will be found southerly and easterly of Laramie Peak, in its vicinity. It was expected that prospecting would commence there early this season, but General King, at Fort Russell, thought there were too many restive and straggling Indians in that vicinity then to warrant the attempt, as it would require military force to render the miners safe from attack.

#### SILVER MINES.

The silver mines of the Rocky Mountains are fast becoming the wonder of the mining world. When the gold mines of the western slope of the Sierra Nevada had been worked for ten years, and the yield on the California side had seriously dwindled in quantity, the miners began to scale the mountains in quest of gold on the eastern slope. But here they found a different class of rocks, which were not gold bearing, yet exhibited vast veins of some sort of mineral, new and unknown to the gold miner. These ores were taken to San Francisco and assayed, and pronounced to be rich in silver. This was the first discovery of the great Comstock lode, then called the Washoe silver mine. Since then, now about thirteen years, Nevada has become the great silver-producing State of the mountains, so that it is not surprising that in 1871 it produced \$22,500,000 in silver bullion.

About three years since the silver mine prospectors of Nevada spread out into the mountains of Utah, and by analogy of the rock formation soon found silver veins in that Territory. Two years ago, and after the discovery of the great Emma silver mine mass of ore, mining and prospecting in Utah took a sudden leap; prospectors spread out in all the mountains; and the result to-day is, that Utah gives promise of soon being as largely silver bearing and silver producing as Nevada. English and eastern capital is now freely flowing there, and the great yield of those rich mines will enable Utah to take high rank in the production of silver bullion.

No gold mines (wholly such) have been discovered in Utah, so far as I know. Some gold accompanies the silver, but the silver largely predominates.

The discovery of silver veins in Utah has had its beneficial effect on Wyoming, and numbers of men have been induced, like myself, to examine Utah silver mines and their inclosing rocks, with a view to discover what *analogy* they might present to those of Wyoming. I visited the Emma mine on the last of June, 1870, just after Mr. Woodman, the chief discoverer, had reached the great ore deposit which has since remained so constant, and given the mine a world wide fame. I inquired of Mr. Woodman why he selected that place to prospect for silver, and why he had retained courage for over a year to follow a small vein of not much over half an inch thick for about 75 feet, and it situated in lime rock. He replied that he had mined in the White Pine mines of Nevada, and concluded to search Utah for similar geological formations, and thought he had found them in the Little Cottonwood Cañon, where the Emma mine is situated. From being a miner of small means, with credit entirely exhausted in working that small discovery for over a year, he suddenly became the owner of a fortune.

This was the well earned reward of his convictions as to the *analogy* between the two mining districts, and also of his indomitable perseverance as a miner, without which few men succeed in any undertaking.

The mineral formation of the Cottonwood Cañon extends south to the head of the American Fork, where there are some very rich mines, and east across the Wasatch divide, to Parley's Park and the valley of the Provo River. This district is not much over fifteen miles in diameter either way, and probably contains more and richer silver veins and deposits than any other equal area of the same compactness in the Territory of Utah. At least no district of the same size has yet been found that will equal this in mineral wealth; and but a small proportion of the mineral deposits existing there have yet been discovered.

The ores in the old limestone formation appear to exist in the form of beds, layers, and bunches between the strata; sometimes a whole stratum carries ore, like the fissure of a compact vertical lode. And in some portions of the strata, near the quartzite or granitic nucleus, the ore is mixed with a stratum of flint or quartzite, between the limestone strata, and exists there in a state of chloride or sulphide, (called "free milling ore,") a striking example of which is seen in the Sparrow Hawk mine at Lewiston, and in some of the mines in the Ophir district, and on the crest of Scott Mountain, at the head of the north fork of the Big Cottonwood Cañon.

The quartzite formation which half encircles the Cottonwood district on the south,



and which contains veins of free milling ore, (chlorides and sulphides,) has not been much "prospected," except along the granitoid range south of Parley's Park, where they lie against the azoic rocks, and incline northwesterly. Here several rich veins have been found in the quartzite—three of which were discovered just before my visit there in July last, to wit: The "MeHenry," and "Red, White and Blue," and the "Ontario lode." The latter appears to be a true fissure vein, running across the quartzite ledges and carrying rich chlorides of silver, and lately purchased by California capital, while the two former are mineral bearing portions or ledges striking northeast and southwest, with the general trend of the formation at that point, and are inclosed within it as if formed at the time the adjoining strata above and below were created. They, therefore, do not resemble true fissure veins, but appear to be portions of the strata impregnated with mineral matter at the time the balance of the strata were formed.

This is the character also of most of the mineral beds or layers found between strata of the limestone formation of that vicinity, and probably formed and charged with mineral matter at the same time the superincumbent strata were building up on the floor of the ancient ocean. These, therefore, might be termed stratified beds or deposits, like coal beds deposited between rocky strata peculiar to the carboniferous age, and not mineral deposits injected between the adjoining strata after the inclosing rocks were formed. True fissure veins are the result of fractures of the rock formation, and the subsequent filling up of mineral matter by forces operating from below, or by deposition from above. It is as easy to account for the deposition of a bed or stratum of mineral ores over a locality charged with mineral product while the rocky superstructure was building up, as to account for the filling of true fissures *after* the formation had been finished.

This is the character of most of the lead deposits of Missouri, which were deposited at stated periods while the rock strata were forming, and at the time when the vents in the floor of the ocean were furnishing siliceous and mineral matter, to be spread out upon the last lime rock stratum then formed.

And hence it is that the lead ores found with horizontal strata are almost always accompanied by a stratum of "flint" or quartzite, which is supposed to be the product of boiling siliceous springs on the floor of the ocean, having alternate periods of activity and repose.

There are very few true fissure veins of galena in Missouri. They are nearly all horizontal deposits, formed on the same principle that appears to have operated in creating the vastly rich stratified bodies of ore we find to exist in the vicinity of the Cottonwood Cañons, (Utah,) being mineralized strata, formed at the period the inclosing rock strata were formed. We see this order of things wonderfully exemplified at Mine la Motte, in Madison County, Missouri, and at the Saint Joseph mine, east of Potosi, Missouri. At both of these mines we find certain of the magnesian lime strata, thoroughly intermixed and charged with lead ore, so rich with galena as to appear almost like a stratum of pure ore. The whole stratum is mined out, crushed, and washed, and after being freed from the rock matter the residue is smelted. The owners feared it existed only in pockets and patches of a mineralized stratum, and eminent State geologists pronounced the deposit unreliable; and yet, with the aid of the diamond drill, this mineral stratum has proved to extend to such distance (here nearly horizontal and close to granitoid exposure) as to add almost millions to the value of the mine.

The mineralized strata in the limestone formation between Parley's Park and the Cottonwood Mines present the same characteristics, as to mode and relative period of deposition, as those similar deposits in Missouri. They are upheaved in Utah to an angle of nearly  $40^{\circ}$ , but the deposition was made when the strata were in a horizontal position.

I have dwelt at more length than I intended on the different forms of mineral beds and veins, in order to illustrate the fact that a stratum of mineral material, formed at the time of the accompanying rocks, and reaching out between those strata for considerable distances, may and does exist in rich mineral bearing districts, and may be relied on for large and permanent yield of ore.

The silver mines of Colorado are no doubt generally true fissure veins, as those at Georgetown, in the gray gneissoid rocks. Also, those around Caribou, where one lode, the "Fourth of July," is said to bear mineral for sixty feet in width, and even miles in length, almost equaling the famed Comstock lode of Nevada.

In the neighborhood of Mount Lincoln, south of Georgetown, silver ores are found both in quartzites and the silurian lime rocks, as above described, in Utah.

No discovery of silver ore has yet been made in the old crystalline lime rocks of Wyoming, but where this formation is half a mile in thickness, on the east side of Medicine Bow Mountain, as I am informed it is by Mr. D. D. Wolff, an intelligent miner who has been prospecting on that mountain this summer, it is not improbable that silver ore will be discovered there. This formation is also of similar thickness along the La Prele, southwest of Fort Fetterman. It is supposed to be of silurian age, and will probably furnish silver with galena ores when duly prospected.



I visited the silver mines of the Seminoe Mountains this summer. Two or three of them in the west mountain (Ferris district) looked quite promising, and a company from Elgin, Illinois, was working them. These mines are about forty miles north of Rawlins Station, and the same distance northwest of Fort Steele. They are found in the gneissoid rocks somewhat similar to those at Georgetown, Colorado. The metamorphic strata are vertical, and the veins of ore the same. The "Coleman lode" is vertical, about four feet in width, with black gneiss on one side, and red or ochreous colored gneiss on the other. The ore appeared to be a mixture of zinc blende, galena, and silver, but its value had not yet been obtained by assay. The "Ferris lode" is similar to the last, except that it occurs in black gneiss and wall rock the same on both sides.

An expensive tunnel was being run by the Elgin Company into a high ridge, said to contain the "Smith lode," but the tunnel should have been run in on the vein instead of in dead and barren rock on one side of the vein.

It is now quite evident to my mind that silver bullion is to remain the chief precious metal product of Nevada and all the Territories within the Rocky Mountains this side of her.

Silver veins are far the most numerous, and pay much better profits than gold. They occupy a much larger variety of rocks, while gold is chiefly confined to the azoic slates, (gneissic and talcose,) which are generally the outlying or flanking rocks of the granitoid nucleus of nearly all the great ranges, especially in California, Montana, and Wyoming.

#### PLUMBAGO MINES.

A valuable plumbago mine has been discovered twelve miles northwest of the Iron Mountains, on the top of the Laramie Mountain. A shaft has been sunk on it by J. J. Kelly & Co., of this city, which exposes a large body of this valuable material.

It is being introduced here as a lubricator of car axles, and also as paint, for which purpose it is thought to be valuable.

Others of the mines of plumbago are known to exist in the same range farther north. One near Laramie Peak is said to be quite large and the material pure.

It is expected that these mines will prove valuable for various economic purposes.

#### NATIONAL SCHOOL OF MINES.

The mining interests of this country are greatly indebted to R. W. Raymond, esq., United States commissioner of mining statistics, for his admirable treatment of the subject of a national school of mines, in which he enumerates the few mining schools of this country, and those larger and more noted schools in Europe, which are chiefly under the patronage of the governments where they are located.

He has thoroughly discussed this subject, and called the attention of Congress to its vast importance, in his official report of 1869, to the Secretary of the Treasury.

There is no public interest calling more imperatively for the fostering aid of Congress than this. My own mining experience in Missouri, twenty years ago, impressed me strongly with the necessity and great importance of mining schools; and it is now more than eighteen years since I laid the subject before the legislature of that State, by memorial, urging that body to establish a State mining school at once, through aid from the United States, which could then be procured. I continued to press the subject at various times since then, advising that the school be made a part of the State University and located at the same place. With the aid of other friends of the measure it has finally been established.

But a national school of mines is an imperative necessity, and it should be located within the Rocky Mountains, where the student can have ready and cheap access to the large mining and metallurgic processes going on within them.

The mining student needs constant opportunity for illustrating the studies in which he is engaged.

The great mines are the place for this study, as well as proximity to the great variety of reduction works now required for the treatment of so many different kinds of ore.

The work of intelligent mining and treatment of ores has but just commenced in the precious metal States and Territories, and only a mere fraction of the mines have been discovered, which exist in so great an abundance within them.

Great numbers of educated miners and metallurgists are now needed for this great work, and the demand will increase tenfold more rapidly than can be supplied from all the mining schools from which the supply now comes.

Senator Stewart, of Nevada, than whom no man more fully appreciates the importance of prompt aid from Congress in the establishment of such an institution, has heretofore introduced and urged the passage of a bill in favor of a national school, and we hope he will not weary in further attention to the subject.

We here quote and indorse the closing paragraph of Professor Raymond, in relation to this subject, from page 229 of his 1869 report:



"The history of the world proves that all nations eminent for profitable and permanent mining have employed two agencies for success—a national mining code and a national mining school."

## CITY OF CHEYENNE.

Cheyenne is the seat of the territorial government, as well as the location of the office of surveyor general and the other United States land offices.

It was founded in the summer of 1867 by the engineers of the Union Pacific Railroad Company, on section 31, township 14 north, range 66 west of the sixth principal meridian.

Its location is in the broad level valley of Crow Creek, surrounded by a grassy plain, and is twenty miles east of the Laramie Mountain proper. Its altitude is 6,040 feet above sea level.

*Population.*—This, in the railroad construction period, was 7,000 to 8,000, most of which was a floating population, composed largely of desperate characters, whose conduct became so reckless as to require the attention of vigilance committees, which caused a healthful weeding out of such persons. This gave the town an unenviable reputation abroad—though then it was without law or law officers to punish the guilty; and much of the human trash from the large cities had to be intimidated and driven away before the better population could dwell in safety.

With the advance of the railroad this population advanced with it, and Laramie City, and other places westward, had to pass the same fiery ordeal of hanging and dispersing the lawless desperadoes.

Now Cheyenne is one of the most orderly, spirited, and law abiding towns on the frontier. Its population at this time is about 2,500. It is permanent, and will continue to increase. The vote cast in September was 829; part of which arose from female suffrage.

*Schools.*—The citizens have erected a fine two-story brick school house, 36 by 50 feet, at a cost of \$13,000, and the scholars now number 125. The population is chiefly from the Eastern and Middle States, and properly appreciate the value of schools and churches.

*Churches.*—These number five: the Episcopalian, Congregational, Methodist, Presbyterian, and Catholic; and the buildings are of a size and character to suit a city of 10,000 people.

*Court-house.*—This is built of brick, and is 55 by 125 feet, (including jail wing,) two stories high, with mansard roof, and cost \$35,000. Mr. M. V. Boughton, of this city, was the contractor, and has built it very substantially and in good taste. Messrs. Lewis & Bancroft, of Denver, were the architects.

*Railroad Hotel.*—This is a first class frame building, with substantial foundation, and is 36 feet wide by 150 feet long, two stories high, with an extension 36 by 36 feet, two stories. It contains 40 rooms for guests, besides attic rooms. The parlor and sleeping rooms are fitted up in best style. The dining room is 36 by 70 feet, and affords fine accommodations for dining the passengers of the three daily trains which meet here at noon, from the East, West, and from Denver.

Mr. George W. Jones is the proprietor, and knows how to keep hotel, as many continental passengers will testify. The old hotel was burned down last December, and the railroad company have erected the present imposing one, at a cost of \$30,000.

*Railroad round house and machine shops.*—The round house is the same size as the one at Laramie City, a semicircle of 60 feet in depth, and accommodates 20 locomotives.

The machine shops are not yet finished; the one partly built is 75 by 150 feet, and substantially built of stone from the mountain. The foundation of the other is 100 by 200 feet. The old frame shop is still used for repairs.

*Water supply.*—The citizens use wells and cisterns, but the streets are watered and the fire department cisterns supplied by a race five miles in length, the water being taken from Crow Creek.

*Cheyenne Lake.*—This is an artificial lake on the table land one and a half miles north of the town, where a large natural concavity existed, covering 60 to 80 acres.

The race from Crow Creek, over three miles in length beyond the lake, conveys the water from the creek to the lake, which is now full, and the depth of water 35 feet. From that point the water is now conveyed into the streets of the town by the continuation of the race.

It is intended soon to bring it in pipes to the town, where it can be carried to the top of the highest buildings, as the bottom of the lake is 40 feet higher than Seventeenth street.

Congress liberally donated 480 acres, including this lake, to Cheyenne at its last session, and the lake has become a favorite resort to the citizens, who already have numerous sailing and row boats upon it. It is to be inclosed and planted with encircling rows of trees, and the avenue between the town and lake also planted with rows of trees on both sides.



When this is done it will merit the pride of the inhabitants, and become a famous daily pleasure resort for all lovers of the beautiful.

*City title.*—The question of title is now settled between the railroad company and the town; the railroad takes a square mile which includes most of the town; but a survey of the town boundary, under the town site law of 1867, gives the city nearly 700 acres adjoining the railroad section. Residence lots sell from \$100 to \$250; business lots from \$10 to \$40 per front foot. Property is rising in value, because the town has business relations with a large extent of country.

There are three large military posts north of Cheyenne, which receive their supplies here. The Indian supplies are also received and sent from here. The moving of all these supplies is done by teams. These resources, together with the business of stock growers, hunters, trappers, miners, &c., afford a large and profitable business to Cheyenne, exclusive of that of the numerous railroad employés, and the trade of villages for five hundred miles along the road.

*Rolling mills and iron furnaces.*—It is in contemplation to establish these works here very soon. The railroad company cannot much longer dispense with a rolling mill. Iron ore is very accessible and abundant, and coal is plentiful along the road west of here, and is believed to exist in sufficient quantities between Cheyenne and the mountain. The question is soon to be tested by boring.

*Fort D. A. Russell.*—This is a twelve company post, and located in sight of town, two and one-half miles distant, on the plain.

The Government proposes to sink a large artesian well there at once, which is a great event for this region, as it will show what can be done in that way, in regard to plans for irrigation on this side of the mountain. Camp Carling, the depot of quartermaster stores, is situated between the town and post, and a side track conveys the cars to its store houses.

*National bank.*—This institution was organized March, 1871. Capital paid in, \$75,000; authorized capital, \$500,000. Its circulation (national bank paper) is \$27,000, based on the \$30,000 United States bonds. Its individual deposits range from \$80,000 to \$90,000; its loans from \$80,000 to \$100,000. A. R. Converse, president; John S. Wild, cashier. It is a sound and flourishing institution, and its capital will be increased as the demands of business require.

Mr. Posey S. Wilson carries on a private banking house in a substantial brick banking building of his own.

Messrs. Curtis & Arnold have a savings bank.

*Manufacture of jewelry.*—Messrs. Joslin & Park, the popular and enterprising jewelers, keep a large stock of fine jewelry, and do a large business. They also manufacture largely, especially of gold watch chains and moss agate jewelry, the agate as well as the gold being the product of this Territory. They established a branch house at Salt Lake City last winter, in charge of Mr. Park, where it has obtained a flourishing business.

*Newspapers.*—There are two papers. The "Leader," published daily and weekly, by the secretary of the Territory, Herman Glafcke, was the first paper published in Wyoming. The Wyoming Tribune, a weekly, is published by Dr. George W. Corey, the land office receiver.

*Furniture and queensware.*—Converse & Warren have three store rooms filled with furniture, queensware, and carpeting, and supply the town and a large extent of country. It is an old and well established house, having been in operation ever since the commencement of the town.

*Brick stores built during the year.*—Five large iron front brick stores have been erected this season, all two stories high. Curtis & Arnold's, 24 by 80 feet; M. V. Boughton's, 24 by 80 feet; E. Nagle's, 24 by 80 feet; Harper & Housman's, 24 by 80 feet; and F. Schweickart's, 24 by 60 feet. These rent for \$1,200 per annum.

The stores of Joslin & Park, P. S. Wilson, Marks & Myers, and B. Hellman, are all of brick; also "Recreation Hall," and several dwelling houses.

The dry goods, grocery, hardware, and other merchants, do an estimated business of \$1,500,000. The freight received at Cheyenne, per Union Pacific Railroad, from July 1, 1871, to July 1, 1872, were as follows:

General merchandise.....	pounds..	9,659,443
Grain.....	do.....	12,363,908
Flour.....	do.....	2,900,240
Coal.....	do.....	8,664,850
Vegetables.....	do.....	689,875
Fruit.....	do.....	839,990
Machinery.....	do.....	330,119
Iron.....	do.....	293,340
Lime.....	bushels..	10,149
Hay.....	car loads..	346
Brick.....	do.....	8
Stone.....	do.....	129



Agricultural implements .....	car loads.....	5
Furniture.....	do.....	13
Lumber.....	do.....	374
Wood.....	do.....	290
Live stock .....	do.....	162

The following article on Laramie City was prepared for the Denver News, from which paper I have taken it. It is a correct and interesting description of the rise and progress of the second town in importance in the Territory.

LARAMIE CITY.

Fifty-six miles west of Cheyenne, on the line of the Union Pacific Railroad, and near the southern extremity of the great plateau, from whence it derives its name, at an altitude of seven thousand one hundred and twenty-three feet, this bustling little city is situated. In April, 1868, the first log cabin was erected ; in thirty days thereafter the railroad was completed to this point, and for twelve months speculation swept wildly on. When the year had ended the peoples' ardor began to abate ; the railroad had spanned the continent, and the multitude were pushing on in quest of fortune in brighter fields. Like all western railroad and mining towns of mushroom growth, this has had its dark days, its sunshine and storms. But as justice is ever a creature of progress, the lawless characters that sapped the moral life of the community in its incipient stages were, by a few determined and well disposed men, summarily driven from the field. Thus for the past eighteen months a steady and substantial prosperity has attended this people, and now a more intelligent and refined population is not to be met with in any similar western town. The Episcopalians, Methodists, Presbyterians, Baptists, and Catholics have elegant churches, all new and complete in every particular. There are also two good buildings devoted to educational purposes ; one the Wyoming Institute, and the other the public graded school. A literary and library association, with nine hundred volumes of standard works, is prominent among the worthy institutions of this young and rising city. Fifteen hundred is their estimated population. Six hundred and twenty-four ballots were cast here at the last election, and if the ratio holds good there ought to be over fifteen hundred inhabitants, notwithstanding there were polled one hundred and twenty-four female votes.

Laramie City enjoys a salubrious climate, with the Black Hills on the east and the main range on the west, and the Laramie plain a broad, level, grassy plateau of eighteen hundred square miles, stretching around on every side.

The Laramie River, a stream carrying about as much water as the Platte at Denver, runs by on the west. It comes in at the south end of the Great Basin, and debouches at its northern extremity, receiving in the mean time several tributaries that come down from the east and from the west. Two and a half miles east a number of beautiful springs rise out of the low limestone bluffs, and as their elevation is more than a hundred feet above the city their waters are utilized, and by a ditch conveyed to all parts of the town—thus affording two thousand inches of pure and wholesome water.

A mile and a half north a quarry of beautiful red sandstone of the triassic formations is furnishing a valuable article of building material, and already a score of substantial structures are resting on such foundations. Around the springs on the east are inexhaustible ledges of limestone that not only furnish a good article for lime, but for house and wall foundations likewise.

Two miles south Fort Sanders is located. It is built principally of logs, and it has accommodation, I believe, for four companies ; but two, however, are now garrisoning the post. The Union Pacific Railroad Company have built here a magnificent system of machine shops, where from seventy-five to one hundred men find constant employment. Most of the company's buildings are composed of a very durable gray sandstone. The roundhouse is in the form of a semicircle, 65 feet deep, containing stalls for twenty engines.

The machine shop comes next, 75 by 125, which contains a score of lathes, for whittling wheels, bars, and bolts of iron into sizes suited to their appropriate places. The floor of this building is a Richardson pavement, and the great wheel lathe, the wheel-boring machine, the hydraulic wheel press, the graduating drill press, and in fact all of the machinery contained in the building, is of the most ponderous character, driven by steam, and works like clock work. Next in order is the blacksmith shop, a building 75 by 100, a building where eight or ten forges belch fire and smoke. The car department is a wooden structure 24 by 25, where all the wood work is conducted and the painting done.

One of Knowles's pumps, No. 8, supplies from the river, a distance of 1,700 feet, all the various departments with pure water. In the locomotive department of the Laramie and Mountain divisions, extending from North Platte to Green River, a distance of five hundred and forty-five miles, two hundred and nine men and forty-eight locomotives are required to do the labor. These locomotives are all very large, and some of them



weigh forty-five tons; even then two of these monsters are harnessed in front of each train, both here and at Cheyenne, to enable them to reach the summit that lies between. From here to Sherman the distance is twenty-three miles, and the average grade is within a small fraction of 50 feet to the mile.

Cheyenne is distant thirty-three miles from this grand elevation, with a grade of almost 70 feet to the mile. The altitude of Sherman is 8,235 feet, the greatest elevation attained, I believe, by any railroad in the world.

The highest point of the Sierra Nevada crossed by the Central Pacific is seven thousand and forty-two feet above the ocean. No one can comprehend the magnitude of this wonderful work without a thorough knowledge of all its details. The carrying trade is enormous, and all along the line cities and villages are rounding into form, and new developments are changing the primitive wilds into fruitful fields.

C. H. Bussard & Dawson, heavy contractors here, inform me that \$150,000 are annually expended at this place by the railroad company for the article of ties alone, most of which are used in the repair of the line east of this point. For wood, lumber, and other articles at least \$150,000 more are required, thus affording to this people a direct revenue from the railroad of \$300,000 a year; that, together with the transient business that flows in from the line and the surrounding country, and the military trade, with inexhaustible bodies of timber fifteen miles west, with water, brick clay, lime, and building stone, of a quality unsurpassed, at their very doors; with Iron Mountain conveniently near on the northeast, rich gold and silver deposits but a short distance west, coal cropping in numerous places, an extensive and well watered grazing region, and a genial mountain climate, renders this a place possessed of more natural advantages than would appear reasonable to casual observers.

For grazing especially, and for hay, this broad basin is certainly an inviting field. Some of the small cereals and many of the hardy vegetables may be profitably grown here, but owing to the altitude and its location it will probably never become of any great value for agricultural purposes.

I, however, saw wheat, oats, and barley near here that stood very heavy on the ground, and Mr. Harris, formerly from Southern Colorado, has, on his farm adjoining the city, nine acres of potatoes that promise a bountiful harvest.

On the opposite side of the river, directly west of here, the territorial penitentiary is rising into stately proportions. The congressional appropriation of \$40,000, granted when Colorado and other Territories were correspondingly favored, is being judiciously expended on the work. The contractors, Woodbury & Mullen, of Black Hawk, Colorado, are the same parties who built the penitentiary at Cañon City, Colorado, and from this building they have adopted the same general plan, with the exception of a wing for kitchen and dining room, 24 by 32. About three hundred perches of stone and three thousand eight hundred pounds more of iron will be required than used at Cañon. The doors and iron bars are a little heavier, and the grates extend the whole length of the windows. Hardly two months have elapsed since the first blow was struck, yet the walls are completed, and the roof will soon echo the finishing stroke. Many of the leading mechanics are Coloradans, and twenty-five men are pushing the work on to completion.

One of the worthy institutions of this place is its magnificent hotel, the Laramie House. Its dimensions are 37 by 228 feet; dining room 37 by 70, with a capacity for two hundred guests at a meal, and a total of sixty-five large, convenient, and well-ventilated rooms. A new and substantial court house and jail overlooks the city from the east. The basement story, which contains seven cells, besides two rooms, occupied by the turnkey, is built of heavy blocks of stone from the quarry near here; the two upper stories are built of brick, the whole surmounted by an observatory that affords an outlook over a wide range of country. Its dimensions are 44 by 70; court room 44 by 44, and twenty feet from floor to ceiling. This floor contains, besides, the jury room and sheriff's office. On the upper floor there are five large offices, and a vault containing the county records. The building is an honor to Albany County and an ornament to Laramie City.

Considerable building improvements are going on here, largely of brick and stone. Brick and lumber are not much higher than in Denver; dry goods and groceries ditto; provisions are from ten to twenty per cent. above Denver prices. The sales last year of the five leading grocery and provision merchants amounted to almost \$500,000. The place supports about twenty-five stores of every kind, two daily papers, and the usual complement of lawyers, doctors, &c.

The following interesting description of the town of Evanston, and the resources of Bear River Valley and Uinta County, has been kindly furnished by Dr. F. H. Harrison, of Evanston, at my request:

#### EVANSTON.

Evanston is situated within a few miles of the western boundary of Wyoming Territory, in the beautiful valley of Bear River, and midway between Omaha and San



Francisco, on the line of the Union Pacific Railroad. It was laid out in 1870 by the Railroad Company, and since that time its growth has been uniform and rapid.

The railroad buildings are as large and extensive as at any point west of Omaha, and owing to the close proximity of coal, and the extensive deposits of iron ore in the surrounding mountains, it is considered an eligible point for the location of rolling mills and iron reduction works. The round house, at present containing twenty stalls, is built of solid masonry, and the machine shops are complete in their supply of the latest and most improved machinery. One hundred men are constantly employed in and around these works, and in addition to these the freight, passenger, and other departments employ quite a number.

The town has been built principally of wood so far, owing to the very low rates at which lumber is furnished; but there are extensive stone quarries at no great distance, east and west, and brick can be readily manufactured on the Bear River bottom, and these will eventually constitute the principal building material.

The population is now about 700, having a little more than doubled in the past year. New buildings are going up in every portion of the town, and it is reasonable to suppose that it will go on increasing rapidly for years to come. The beauty of the surrounding scenery, the number and variety of sulphur and mineral springs, and the game which can be found in abundance in the mountains, render this vicinity a favorite resort for invalids and pleasure seekers.

*Coal resources.*—About three miles down Bear River, and connected with Evanston by a spur of railroad, are located the coal mines. These mines are almost unlimited in extent, the vein being not less than twenty feet thick in any of the locations; and the quality of the coal is very superior.

Three companies are at present operating, and their aggregate shipments are about sixty car loads per day. This interest is rapidly increasing, and being the extreme west end of the coal basin, all the States and Territories west must eventually look to Evanston for a large part of their coal supply. At present the entire Central Pacific, Utah Central, Utah Northern, and two hundred miles of the Union Pacific Railroads, draw their supplies from this point. A narrow gauge railroad is now in contemplation, to run via Bear Lake to Soda Springs, and there connect with the Utah Northern. This would, when completed, greatly facilitate the shipping of coal to the Territories north, and render it the cheapest fuel available.

*Agriculture.*—From the point where Bear River emerges from the mountains, to the Bear Lake settlements, a distance of seventy-five miles, the whole Bear River bottom, comprising an area of many thousand acres, is capable of cultivation. The quality of the soil is unsurpassed, being a rich black loam, and the cost of irrigation is less than in Utah or Colorado.

The Bear Lake Valley was originally settled by Mormons, and comprises at present a population of three or four thousand people. These are gradually extending their settlements up Bear River, and, together with the emigration both from East and West, will soon fill the entire valley with a prosperous farming community; and the stock growers who now fatten their herds in this fertile valley will have to seek other pastures and other ranges.

*Timber.*—The cañons and mountains at the headwaters of Bear River contain an inexhaustible supply of timber, principally spruce and pine, well adapted to building, lumber, ties, &c., &c. This can be cut and floated down the river during high water at very small expense, and those parties who have engaged in the business find it highly profitable. The Evanston Lumbering Company brought down enough in one drive to produce 3,000,000 feet of lumber.

*Oil.*—At the foot of Quaking Asp Mountain, twelve miles east of Evanston, considerable discoveries of oil have been made. The indications cover a large tract of country, which bids fair to become a rich oil region. The oil, in its crude state, is used by the railroad company for lubricating purposes, and as a natural lubricator it probably has no superior. Companies are now forming with a view of operating in this district, which certainly offers most encouraging prospects.

*Sulphur.*—The Sulphur Mountain is situated up Bear River, thirty miles from Evanston, and of easy access. This is probably the largest deposit of sulphur that has yet been discovered in the world; equal in size to the Iron Mountain of Missouri, and assaying 90 per cent. of pure sulphur. It contains enough of this mineral to supply the demands of the whole United States for hundreds of years to come. At present our sulphur of commerce is extracted from mines of great depth in Sicily, shipped to this country, and made profitable, although the ore is much inferior to ours in richness. The advantage, therefore, of working this mine, in competition with the foreign product, becomes at once apparent.

I may add, in conclusion, that our magnificent stock ranges, our fertile valleys, our rich mining interests, and our invigorating and healthful climate, are inducements to emigration, which cannot be claimed by any other of the Territories with a greater degree of justice.



## UNION PACIFIC RAILROAD.

We have endeavored to obtain a statement of the business and travel over this continental thoroughfare, during the past year, or at least up to the 1st of September, but have been unable to do so in full. We give below the amount of freights of the year ending January 1, 1872, which is interesting in respect to the amount of products transported over it eastward from China, Japan, South America, California, and the bullion and ores of Utah. This season the business has increased, both East and West, at least 50 per cent., judging from the increased number of large trains passing Cheyenne, and the knowledge obtained by inquiry, of this character of freights. It is wonderful to behold the amount of produce of the adjoining States East that come West into the mountains, making a market for them far preferable to that of Chicago or New Orleans, and also the increased freights this season from the East Indies, in teas and silks, and from Utah and Nevada in bullion and ores. This continental thoroughfare is producing wonders in the opening up of these mountain districts, and also in respect to the trade with China and Japan. In addition to the hundred-fold increase of vessels by the Pacific Mail Steamship Company, English capitalists are introducing a line of steam propellers between San Francisco and the East Indies, probably for the purpose of being the carriers of English and European freights, which are now so freely crossing the continent over this road. Immigration from China, also, increases; so that now the railroad employs mostly Chinamen to keep their road in repair through most of Wyoming, and several hundred are employed in the Rocky Mountain Coal Company at Evanston.

We here append the freight of the road above alluded to.

The amount of freight transported was 534,407,164 pounds, and consisted of the following articles, viz:

Tea, pounds.....	18,058,810, from China and Japan.
Silk, pounds.....	897,015, from China and Japan.
Coffee, pounds.....	1,745,876, from Central America, (mostly.)
Wool, pounds.....	19,207,351, from California and Australia.
Furs, pounds.....	1,392,180, from Alaska, Siberia, &c.
Wine, casks.....	4,023, from California.
Wine, cases.....	6,173, from California.
Brandy, casks.....	335, from California.
Brandy, pipes.....	38, from California.
Green fruit, pounds.....	3,266,746, from California.
Leather and hides, pounds.....	2,140,813, from California, (mostly.)
Horses and cattle, head.....	25,137, from Nebraska and Wyoming, (mostly.)
Hogs and sheep, head.....	31,774.
Fresh and salted meats, pounds.....	3,179,806.
Bullion, tons.....	2,661, from Utah, (mostly.)
Ores, tons.....	9,011, from Utah, (mostly.)
Coal, tons.....	86,966, from Wyoming.
Stone, tons.....	2,332.
Lime, bushels.....	22,964.
Salt, bushels.....	5,935.
Lumber and timber, feet.....	15,856,484.
Wood, cords.....	4,674.
General merchandise, pounds ..	167,065,967.
Machinery, pounds.....	3,622,952.
Railroad iron, pounds.....	10,411,910.
Flour, barrels.....	43,797.
Grain and vegetables, bushels..	774,867.
Hay, tons.....	2,409.
Other agricultural products, lbs.	318,570.

The above does not include the freight transported by the company for its own use.

The following items of freight have been brought west from the adjoining States this season for use along the base of the mountains, and the country between here and Salt Lake. They serve to show how rapidly the market is increasing in the mountain region and in the mines for agricultural and other products of the Missouri Valley States.

It is encouraging to the farmers in the new State east of us.

Grain, pounds, 37,000,000.

Flour, pounds, 4,500,000.

Live hogs, head, 6,681.

Sheep and other live stock, head, 34,000.

Miscellaneous freight, pounds, 70,000,000.

Corn manufactured into high wine and shipped from one distillery in Omaha, 100,000 bushels.

Below will be found the aggregate of the passenger earnings from January 1 to



October 1, 1872, furnished by Thomas L. Kimball, esq., general ticket agent at Omaha, Nebraska :

January.....	\$114,470 93
February.....	74,451 17
March.....	201,484 34
April.....	309,458 30
May.....	372,779 94
June.....	343,741 05
July.....	282,359 36
August.....	318,494 70
September.....	365,959 92
Aggregate.....	2,383,199 71

ACCOMPANYING DOCUMENTS.

- A. Statement of surveys under the appropriation of \$40,000 made by act of Congress, approved March 3, 1871, for surveying the public lands of Wyoming Territory.
- B. Statement of coal lands surveyed in Wyoming Territory to June 30, 1872, as shown by the official plats.
- C. Statement of townships in Wyoming Territory from June 30, 1871, to June 30, 1872, of which the field notes have been returned, examined, and approved.
- D. Statement of the amount expended for compensation of surveyor general of Wyoming Territory, and of clerks in his office, during the fiscal year ending June 30, 1872.
- E. Statement of the amount expended for incidental expenses of the office of surveyor-general, Wyoming Territory, during the fiscal year ending June 30, 1872.
- F. Estimate of the appropriations required for the surveying service in the Territory of Wyoming for the fiscal year ending June 30, 1874.
- G. Map of Wyoming Territory, showing the extent of the official surveys and reservations.

Very respectfully, your obedient servant,

SILAS REED,  
Surveyor General Wyoming Territory.

To Hon. WILLIS DRUMMOND,  
Commissioner General Land Office, Washington, D. C.

A.—Statement of surveys contracted for under the appropriation of \$40,000 made by act of Congress approved March 3, 1871, for surveying the public lands in Wyoming Territory.

Number of contract.	Date.	Name of deputy.	Work embraced in contract.	Remarks.
18	1871. July 1	Henry G. Hay .....	The 8th guide meridian, between the 5th and 6th standard parallels; the 9th guide meridian, between the 5th and 6th standard parallels; the 6th standard parallel, between the 8th and 9th and between the 9th and 10th guide meridians. The exterior lines of townships 17, 18, 19, and 20 north, of ranges 77 and 78 west. The subdivision lines of townships 18, 19, and 20 north, of range 76 west.	The work under this contract has been completed, with the exception of the exteriors of three townships, and the completed part paid for, amounting to \$4,627.26.
19	July 1	John B. Thomas.....	The 5th standard parallel, between the 9th and 10th guide meridians; the 10th guide meridian, between the 4th and 5th and the 5th and 6th standard parallels. The exterior lines of townships 19 and 20 north, of ranges 73, 74, 75, and 76 west. The subdivision lines of townships 18, 19, and 20 north, of range 77 west, and of townships 19 and 20 north, of range 78 west.	The surveys under this contract have been completed, with the exception of the subdivisions of two townships, and the completed portion paid for, amounting to \$4,064.40.



## A.—Statement of surveys contracted for, &amp;c.—Continued.

Number of contract.	Date.	Name of deputy.	Work embraced in contract.	Remarks.
20	1871. July 5	Alfred M. Rogers .....	The exterior lines of townships 21, 22, 23, and 24 north, of ranges 73, 75, 77, and 79 west. The subdivision lines of townships 19 north, of ranges 73, 74, and 75 west, and of township 22 north, of ranges 76 and 80 west.	The surveys under this contract are all completed, and have been paid for, with the exception of one township of subdivisions. The portion paid for am'ts to \$4,403.56.
21	July 5	Edwin James.....	The exterior lines of townships 21, 22, 23, and 24 north, of ranges 74, 76, 78, and 80 west. The subdivision lines of township 20 north, of ranges 73, 74, and 75 west; of township 21 north, range 75 west; and of township 22 north, range 79 west.	The surveys under this contract have been completed and paid for, amounting to \$4,744.20.
22	July 10	William O. Downey...	The 14th guide meridian, between the 3d and 4th standard parallels; the 3d standard parallel, between the 14th and 15th guide meridians; the 15th guide meridian, between the 3d and 4th standard parallels. The exterior lines of townships 13, 14, 15, and 16 north, of ranges 119 and 120 west.	The surveys under this contract have been completed and paid for, amounting to \$2,466.86.
23	July 10	Stephen W. Downey & Mortimer N. Grant.	The subdivision lines of townships 13, 14, 15, and 16 north, of range 120 west.	The surveys under this contract have been completed and paid for, amounting to \$2,421.45.
24	July 15	J. Wesley Hammond..	The subdivision lines of fractional townships 13 and 15 north, of range 60 west, and of townships 13 and 14 north, of ranges 61 and 62 west.	The surveys under this contract have been completed and paid for, amounting to \$3,350.82.
25	Sept. 6	Nicholas J. Paul.....	The exterior lines of townships 13, 14, 15, and 16 north, of ranges 70, 71, and 72 west.	The surveys under this contract have been completed and paid for, amounting to \$1,233.83.
26	Sept. 13	J. Wesley Hammond..	The subdivision lines of townships 22 north, of ranges 75 and 77 west, and of township 21 north, of range 76 west.	The surveys under this contract have been completed and paid for, amounting to \$1,830.37.
27	Oct. 14	James N. Paul.....	The subdivision lines of townships 14 and 15 north, of range 71 west.	The surveys under this contract have been completed and paid for, amounting to \$1,197.22.
28	Oct. 27	J. Wesley Hammond..	The subdivision lines of township 22 north, of range 78 west.	The surveys under this contract have been completed and paid for, amounting to \$600.60.
29	1872. May 8	Mortimer N. Grant....	The subdivision lines of townships 13 and 14 north, of range 76 west.	Surveys in progress.
30	May 9	Alfred M. Rogers.....	The subdivision lines of townships 21 and 22 north, of range 74 west.	Surveys in progress.
31	May 9	Edwin James.....	The subdivision lines of townships 21, 22, and 23 north, of range 73 west.	Surveys in progress.
32	May 9	John B. Thomas.....	The subdivision lines of townships 17 and 18 north, of ranges 69 and 70 west.	Surveys in progress.

SILAS REED,  
Surveyor General of Wyoming.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Cheyenne, Wyoming, June 30, 1872.



## B.—Statement of coal lands surveyed in Wyoming Territory to June 30, 1872, as shown by the official plats.

Township in which contained.	No. of acres.
Township 19 north, range 77 west.....	1,920.00
Township 20 north, range 77 west.....	160.00
Township 22 north, range 79 west.....	629.45
Township 22 north, range 80 west.....	7,052.31
Township 15 north, range 120 west.....	11,364.78
Township 16 north, range 120 west.....	22,890.36
Aggregate of coal lands surveyed to date.....	44,016.90

SILAS REED,  
Surveyor General of Wyoming.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Cheyenne, Wyoming, June 30, 1872.

## C.—Statement of townships surveyed in Wyoming Territory from June 30, 1871, to June 30, 1872, of which the field notes have been returned, examined, and approved.

Township.	Range.	Area, (acres.)	Remarks.
13 north .....	60 west .....	17,490.32	Fractional by Nebraska boundary.
13 north .....	61 west .....	22,975.71	
13 north .....	62 west .....	23,081.61	
13 north .....	63 west .....	23,006.08	
13 north .....	64 west .....	22,991.69	
13 north .....	120 west .....	23,073.77	
14 north .....	60 west .....	17,301.52	Fractional by Nebraska boundary.
14 north .....	61 west .....	22,940.28	
14 north .....	62 west .....	23,154.26	
14 north .....	63 west .....	22,996.81	
14 north .....	64 west .....	22,930.58	
14 north .....	71 west .....	22,930.44	
14 north .....	120 west .....	23,001.04	
15 north .....	60 west .....	17,163.40	Fractional by Nebraska boundary.
15 north .....	63 west .....	22,981.75	
15 north .....	64 west .....	22,873.12	
15 north .....	71 west .....	22,941.41	
15 north .....	120 west .....	23,002.98	
16 north .....	63 west .....	23,110.51	
16 north .....	64 west .....	22,855.48	
16 north .....	76 west .....	23,140.35	
16 north .....	77 west .....	24,799.61	
16 north .....	120 west .....	24,067.43	
18 north .....	71 west .....	22,964.28	
18 north .....	73 west .....	23,015.88	
18 north .....	74 west .....	23,080.57	
18 north .....	75 west .....	23,021.88	
18 north .....	76 west .....	22,958.11	
18 north .....	77 west .....	22,499.23	
19 north .....	71 west .....	22,992.70	
19 north .....	74 west .....	23,172.26	
19 north .....	75 west .....	19,436.17	Contains a lake of about 3,500 acres in area.
19 north .....	76 west .....	22,997.54	
19 north .....	77 west .....	22,489.55	
20 north .....	73 west .....	22,578.70	
20 north .....	74 west .....	21,159.48	Contains a lake of about 1,200 acres in area.
20 north .....	75 west .....	22,323.18	
20 north .....	76 west .....	22,219.75	
20 north .....	77 west .....	21,665.24	
21 north .....	75 west .....	23,063.97	
21 north .....	76 west .....	23,071.53	
22 north .....	75 west .....	23,140.25	
22 north .....	76 west .....	23,274.70	
22 north .....	77 west .....	22,793.00	Contains a lake of about 200 acres in area.
22 north .....	78 west .....	23,101.76	
22 north .....	79 west .....	22,970.80	
22 north .....	80 west .....	23,067.32	
Total.....		1,057,928.00	



## RECAPITULATION.

Number of townships surveyed.....	47	<i>Area in acres.</i> 1, 057, 928. 00
Number surveyed per previous report.....	35	768, 615. 09
Total surveyed to date.....	82	1, 826, 543. 09

SILAS REED,  
*Surveyor General of Wyoming.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Cheyenne, Wyoming, June, 30 1872.*

D.—Statement of the amount expended for compensation of the surveyor general of Wyoming Territory, and for clerks in his office, during the fiscal year ending June 30, 1872.

Name.	Position.	Quarter.	Amount of service.	Amount paid.	Amount expended during quarter.
Silas Reed.....	Surveyor general.	First quarter...	Entire quarter....	\$750	\$1, 925
Charles J. Reed.....	Chief clerk.....	do.....	do.....	450	
Richard Blackstone...	Draughtsman.....	do.....	do.....	375	
Leverett C. Stevens...	Clerk.....	do.....	do.....	350	
Silas Reed.....	Surveyor general.	Second quarter..	do.....	750	1, 925
Charles J. Reed.....	Chief clerk.....	do.....	do.....	450	
Richard Blackstone...	Draughtsman.....	do.....	do.....	375	
Leverett C. Stevens...	Clerk.....	do.....	do.....	350	
Silas Reed.....	Surveyor general.	Third quarter...	do.....	750	1, 925
Charles J. Reed.....	Chief clerk.....	do.....	do.....	450	
Richard Blackstone...	Draughtsman.....	do.....	do.....	375	
Leverett C. Stevens...	Clerk.....	do.....	do.....	350	
Silas Reed.....	Surveyor general.	Fourth quarter.	do.....	750	1, 925
Charles J. Reed.....	Chief clerk.....	do.....	do.....	450	
Richard Blackstone...	Draughtsman.....	do.....	do.....	375	
Leverett C. Stevens...	Clerk.....	do.....	do.....	350	
Total amount expended .....					7, 700
Appropriation of March 3, 1871, for compensation of surveyor general .....					3, 000
Appropriation of March 3, 1871, for compensation of clerks .....					4, 000
Appropriation of June 10, 1872, for deficiency in the appropriation for clerks.....					700
					7, 700

SILAS REED,  
*Surveyor General of Wyoming.*

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
*Cheyenne, Wyoming, June 30, 1872.*



E.—Statement of the amount expended for the incidental expenses of the office of the surveyor general of Wyoming Territory during the fiscal year ending June 30, 1872.

To whom paid.	Quarter.	Items.	Amount.	Amount expended during quarter.
A. R. Converse .....	1st quarter..	Sundries .....	43 58	
Joseph & O'Brien.....	do .....	Stationery .....	48 00	
N. A. Baker .....	do .....	Printing .....	12 50	
Stimpson & Barnard .....	do .....	Ice .....	15 80	
Dempsey & O'Toole.....	do .....	Stationery .....	14 00	
P. S. Wilson .....	do .....	Rent .....	100 00	
Silas Reed .....	do .....	Miscellaneous, per vouchers .....	78 45	312 33
N. A. Baker.....	2d quarter ..	Stationery and printing.....	23 00	
Joseph & O'Brien .....	do .....	Stationery .....	31 15	
E. P. Snow.....	do .....	Fuel .....	25 25	
P. S. Wilson .....	do .....	Rent.....	160 00	
Silas Reed .....	do .....	Miscellaneous, per vouchers .....	128 94	308 34
George O'Brien .....	3d quarter ..	Stationery .....	15 95	
E. P. Snow.....	do .....	Fuel .....	18 50	
Converse & Warren.....	do .....	Sundries .....	13 00	
P. S. Wilson .....	do .....	Rent.....	100 00	
Silas Reed .....	do .....	Miscellaneous, per vouchers .....	152 40	299 85
George O'Brien .....	4th quarter..	Stationery .....	42 25	
Converse & Warren .....	do .....	Furniture, stoves, carpets, and fixtures.....	577 75	
P. S. Wilson .....	do .....	Rent.....	100 00	
Silas Reed .....	do .....	Miscellaneous, per vouchers .....	124 44	844 44
Total amount expended .....				1,764 96
Amount of appropriation made by act of Congress approved March 3, 1871, for incidental expenses.....				2,500 00
Amount unexpended and reverting to United States Treasury .....				735 04

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Cheyenne, Wyoming, June 30, 1872.

SILAS REED,  
Surveyor General of Wyoming.

F.—Estimate of appropriations required for the Surveying service in the Territory of Wyoming for the fiscal year ending June 30, 1874.

For extending the standard and meridian lines, and for surveying township and subdivision lines of agricultural, grazing, iron, and coal lands, at various points along the line of the Union Pacific Railroad, and in the valleys of the Platte and Laramie Rivers.....	\$40,000 00
For salary of surveyor general.....	3,000 00
For salaries of clerks.....	6,000 00
For rent, fuel, stationery, messenger, and incidental expenses.....	2,500 00
Total .....	51,500 00

SILAS REED,  
Surveyor General of Wyoming.

UNITED STATES SURVEYOR GENERAL'S OFFICE,  
Cheyenne, Wyoming, August 10, 1872.



No. 1.—*Tabular statement showing the number of acres of public lands surveyed in the following land States and Territories up to June 30, 1871, during the fiscal year, and the total of the public lands surveyed up to June 30, 1872; also the total area of the public domain remaining unsurveyed within the same.*

Land States and Territories.	Areas of public land in States and Territories.		Number of acres of public lands surveyed up to June 30, 1871.	Number of acres of public lands surveyed prior to June 30, 1871, not heretofore reported.	Number of acres of public lands surveyed within the fiscal year ending June 30, 1872.	Total of public lands surveyed up to June 30, 1872.	Total area of public lands remaining unsurveyed, and of course unoffered and undisposed of, inclusive of the area of private land claims surveyed up to June 30, 1872.
	In acres.	In square miles.					
Wisconsin .....	34, 511, 360	53, 924	34, 511, 360	.....	.....	34, 511, 360	.....
Iowa .....	35, 228, 800	55, 045	35, 228, 800	.....	.....	35, 228, 800	.....
Minnesota .....	53, 459, 840	83, 531	29, 327, 305	787, 384. 36	*2, 072, 715. 45	32, 187, 405	21, 272, 435
Kansas .....	52, 043, 520	81, 318	36, 173, 074	129, 151. 01	†3, 277, 440. 37	39, 579, 665	12, 463, 855
Nebraska .....	48, 636, 800	75, 995	21, 571, 130	.....	3, 662, 692. 16	25, 233, 822	23, 402, 978
California .....	120, 947, 840	188, 981	33, 900, 632	527, 016. 01	1, 724, 674. 52	36, 152, 323	84, 795, 517
Nevada .....	71, 737, 741	112, 090	4, 876, 447	.....	1, 289, 233. 15	6, 165, 680	65, 572, 061
Oregon .....	60, 975, 360	95, 274	10, 140, 281	539, 199. 55	‡1, 541, 314. 28	12, 230, 795	48, 754, 565
Washington Ter ..	44, 796, 160	69, 994	5, 773, 719	62, 431. 49	1, 195, 447. 34	7, 031, 598	37, 764, 562
Colorado Ter .....	66, 880, 000	104, 500	8, 902, 899	.....	2, 076, 001. 74	10, 978, 901	55, 901, 099
Utah Ter .....	54, 065, 075	84, 476	3, 762, 946	172, 292. 97	646, 865. 33	4, 582, 104	49, 482, 971
Arizona Ter .....	72, 906, 304	113, 916	1, 951, 343	.....	517, 332. 60	2, 468, 675	70, 437, 629
New Mexico Ter ..	77, 568, 640	121, 201	4, 402, 273	17, 712. 00	2, 990. 50	4, 422, 975	73, 145, 665
Dakota Ter .....	96, 595, 840	150, 932	6, 577, 427	.....	864, 034. 67	7, 441, 462	89, 154, 378
Idaho Ter .....	55, 228, 160	86, 294	1, 524, 055	.....	840, 749. 80	2, 364, 805	52, 863, 355
Montana Ter .....	92, 016, 640	143, 776	2, 459, 163	.....	1, 071, 740. 32	3, 530, 908	88, 485, 732
Wyoming Ter .....	62, 645, 120	97, 883	770, 167	318, 105. 80	766, 070. 70	1, 854, 343	60, 790, 777
Missouri .....	41, 824, 000	65, 350	41, 824, 000	.....	.....	41, 824, 000	.....
Alabama .....	32, 462, 080	50, 722	32, 462, 080	.....	.....	32, 462, 080	.....
Mississippi .....	30, 179, 840	47, 156	30, 179, 840	.....	.....	30, 179, 840	.....
Louisiana .....	26, 461, 440	41, 346	23, 465, 949	.....	224, 927. 79	23, 690, 877	2, 770, 563
Arkansas .....	33, 406, 720	52, 198	33, 406, 720	.....	.....	33, 406, 720	.....
Florida .....	37, 931, 520	59, 268	27, 531, 587	206, 433. 19	354, 388. 89	28, 092, 409	9, 839, 111
Ohio .....	25, 576, 960	39, 964	25, 576, 960	.....	.....	25, 576, 960	.....
Indiana .....	21, 637, 760	33, 809	21, 637, 760	.....	.....	21, 637, 760	.....
Michigan .....	36, 128, 640	56, 451	36, 128, 640	.....	.....	36, 128, 640	.....
Illinois .....	35, 462, 400	55, 410	35, 462, 400	.....	.....	35, 462, 400	.....
Indian Ter .....	44, 154, 240	68, 991	1, 350, 107	275, 046. 26	7, 322, 319. 94	§8, 947, 473	35, 206, 767
Alaska .....	369, 529, 600	577, 390	.....	.....	.....	.....	369, 529, 600
Total .....	1, 834, 998, 400	2, 867, 185	550, 879, 069	3, 034, 772. 64	29, 450, 939. 55	583, 364, 780	1, 251, 633, 620

\* Of the surveys in Minnesota 339,550.40 acres Chippewas of Mississippi Indian lands, under treaty of March 19, 1867, were subdivided into 40-acre tracts.

† Of the surveys in Kansas 434,679.36 acres are Cherokee strip under fourth article of treaty of July 19, 1866, and 3,247.60 Fort Zarah useless military reservation.

‡ Of the surveys in Oregon 150,531.58 acres are in the Umatilla Indian reserve; 34,806.25 acres in Warm Springs; 17,191.75 acres in Siletz, and 10,573.42 acres in Grand Ronde Indian reservation.

§ Of the surveys in the Indian Territory 4,649,958.48 acres are Chickasaw lands, and 4,297,515 acres Cherokee, Creek, and Seminole ceded lands to the United States.

WILLIS DRUMMOND,  
Commissioner.

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.



No. 2.—Statement of public lands sold, of cash and bounty land scrip received therefor, number sixth section of said act; also, of land located with scrip under the agricultural college and thereof, and statement of incidental expenses thereon, in the first half of the fiscal year

States and Territories.	Land offices.	Quantity sold for cash and bounty land scrip, at and above the minimum price of \$1 25 per acre, and amounts received for the same, for the first half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the first half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Ohio .....	Chillicothe .....	40. 00	\$500 00	\$500 00	.....
Indiana .....	Indianapolis .....	164. 97	206 21	206 21	.....
Illinois .....	Springfield .....	.....	.....	.....	.....
Missouri .....	Booneville .....	6, 333. 64	9, 964 78	9, 964 78	.....
Do .....	Ironton .....	1, 624. 30	3, 969 50	3, 969 50	.....
Do .....	Springfield .....	1, 899. 64	3, 369 99	3, 369 99	.....
Total .....	.....	9, 857. 58	17, 304 27	17, 304 27	.....
Alabama .....	Huntsville .....	80. 91	157 73	157 73	.....
Do .....	Montgomery .....	28. 38	401 44	401 44	.....
Do .....	Mobile .....	63. 45	73 75	73 75	.....
Total .....	.....	172. 74	632 92	632 92	.....
Mississippi .....	Jackson .....	.....	307 29	307 29	.....
Louisiana .....	New Orleans .....	159. 90	2, 401 55	2, 401 55	.....
Do .....	Natchitoches .....	135. 42	344 00	344 00	.....
Total .....	.....	295. 32	2, 745 55	2, 745 55	.....
Michigan .....	Detroit .....	8, 682. 62	12, 683 22	12, 683 22	.....
Do .....	East Saginaw .....	29, 672. 55	57, 855 34	57, 855 34	.....
Do .....	Ionia .....	10, 892. 05	25, 825 37	25, 825 37	.....
Do .....	Marquette .....	18, 698. 40	27, 821 07	27, 721 07	\$100 00
Do .....	Traverse City .....	14, 425. 05	31, 433 21	31, 233 21	200 00
Total .....	.....	82, 370. 67	155, 618 21	155, 318 21	300 00
Arkansas .....	Little Rock .....	137. 49	1, 631 54	1, 631 54	.....
Do .....	Camden .....	10. 71	243 06	243 06	.....
Do .....	Harrison .....	68. 03	537 60	537 60	.....
Do .....	Dardanelle .....	.....	1, 680 36	1, 680 36	.....
Total .....	.....	216. 23	4, 092 56	4, 092 56	.....
Florida .....	Tallahassee .....	61. 49	637 42	637 42	.....
Iowa .....	Des Moines .....	128. 05	163 88	163 88	.....
Do .....	Council Bluffs .....	320. 00	400 00	400 00	.....
Do .....	Fort Dodge .....	2, 017. 56	3, 469 93	3, 469 93	.....
Do .....	Sioux City .....	5, 812. 71	28, 994 22	28, 994 22	.....
Total .....	.....	8, 278. 32	33, 028 03	33, 028 03	.....
Montana .....	Helena .....	1, 848. 14	5, 999 90	5, 999 90	.....



ber of acres entered under the homestead law of May 20, 1862, of commissions received under mechanic act of July 2, 1862, and commissions received by registers and receivers on the value commencing July 1, 1870, and ending June 30, 1872.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the first half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also bounty land scrip, and of cash under homestead act of 1862, and acts amendatory.		Quantity of land located in the first half of said fiscal year with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
200.00	\$15 00	\$6 00	\$21 00	240.00	\$521 00	.....	.....	\$616 40
.....	.....	.....	.....	164.97	206 21	.....	.....	509 94
.....	.....	2 00	2 00	.....	2 00	.....	.....	708 50
33,107.69	2,700 00	1,513 93	4,213 93	39,441.33	14,178 71	160.00	\$4 00	2,522 99
18,272.07	1,350 00	675 50	2,025 50	19,896.37	5,995 00	.....	.....	1,910 89
39,654.25	3,405 00	2,035 00	5,440 00	41,553.89	8,809 99	.....	.....	2,871 36
91,034.01	7,455 00	4,224 43	11,679 43	100,891.59	28,983 70	160.00	4 00	7,305 24
22,991.44	1,625 00	637 00	2,262 00	23,072.35	2,419 73	.....	.....	3,463 75
37,457.36	3,205 00	1,369 00	4,574 00	37,485.74	4,975 44	.....	.....	1,568 60
30,274.11	2,205 00	857 00	3,062 00	30,337.56	3,135 75	.....	.....	1,395 63
90,722.91	7,035 00	2,863 00	9,898 00	90,895.65	10,530 92	.....	.....	6,427 98
69,540.53	5,480 00	2,052 01	7,532 01	69,540.53	7,839 30	.....	.....	2,786 58
38,263.32	2,590 00	960 58	3,550 58	38,423.22	5,952 13	.....	.....	1,682 59
48,454.99	3,685 00	1,387 71	5,072 71	48,590.41	5,416 71	.....	.....	1,437 31
86,718.31	6,275 00	2,348 29	8,623 29	87,013.63	11,368 84	.....	.....	3,119 90
9,976.91	700 00	333 70	1,033 70	18,659.53	13,716 92	.....	.....	1,482 16
9,895.49	750 00	453 49	1,203 49	39,568.04	59,058 83	.....	.....	2,250 00
22,834.78	1,910 00	1,540 27	3,450 27	33,276.83	29,275 64	.....	.....	2,879 92
5,811.06	375 00	212 30	587 30	24,509.46	28,408 37	.....	.....	3,035 75
22,601.16	1,704 00	2,060 26	3,764 26	37,026.21	35,197 47	.....	.....	4,288 14
71,119.40	5,439 00	4,600 02	10,039 02	153,490.07	165,657 23	.....	.....	13,935 97
56,549.32	4,880 00	1,902 38	6,782 38	56,686.81	8,413 92	.....	.....	3,386 85
26,268.66	1,935 00	699 16	2,634 16	26,279.37	2,877 22	.....	.....	1,340 36
42,949.59	2,715 00	1,502 74	4,217 74	43,017.62	4,755 34	.....	.....	1,723 28
56,204.86	4,195 00	1,578 94	5,773 94	56,204.86	7,454 30	.....	.....	2,158 76
181,972.43	13,725 00	5,683 22	19,408 22	182,188.66	23,500 78	.....	.....	8,609 25
44,213.65	3,115 00	1,236 00	4,351 00	44,275.14	4,988 42	.....	.....	2,392 08
207.59	25 00	69 53	94 53	335.64	258 41	.....	.....	694 47
1,731.16	190 00	123 00	313 00	2,051.16	713 00	.....	.....	684 14
10,864.56	1,105 00	801 72	1,906 72	12,882.12	5,376 65	.....	.....	1,413 11
123,063.70	11,375 00	6,335 00	17,710 00	128,876.41	46,704 22	7,661.59	192 00	3,143 85
135,867.01	12,695 00	7,329 25	20,024 25	144,145.33	53,052 28	7,661.59	192 00	5,935 57
15,441.03	975 00	582 00	1,557 00	17,289.17	7,556 90	10,538.75	264 00	2,916 57



## No. 2.—Statement of public lands sold, of cash and bounty land scrip received therefor

States and Territories.	Land offices.	Quantity sold for cash and bounty land scrip, at and above the minimum price of \$1.25 per acre, and amounts received for the same, for the first half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the first half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Arizona.....	Prescott .....	1, 280. 00	\$1, 600 00	\$1, 600 00	.....
Utah Ter.....	Salt Lake City.....	10, 812. 01	15, 070 13	15, 070 13	.....
Wisconsin.....	Menasha.....	24, 310. 90	31, 938 27	31, 938 27	.....
Do.....	Falls of Saint Croix .....	7, 943. 49	19, 862 06	19, 862 06	.....
Do.....	Stevens Point.....	32, 903. 84	41, 784 91	41, 784 91	.....
Do.....	La Crosse.....	9, 020. 06	13, 047 25	13, 047 25	.....
Do.....	Bayfield .....	21, 525. 28	48, 484 23	46, 228 82	\$2, 255 41
Do.....	Eau Claire.....	110, 006. 28	143, 139 82	140, 339 82	2, 800 00
Total.....	.....	205, 709. 85	298, 256 54	293, 201 13	5, 055 41
California.....	San Francisco.....	36, 152. 82	55, 040 26	55, 040 26	.....
Do.....	Sacramento.....	8, 202. 13	26, 055 22	26, 055 22	.....
Do.....	Marysville.....	18, 528. 51	40, 540 60	40, 540 60	.....
Do.....	Humboldt .....	7, 461. 51	9, 326 88	9, 326 88	.....
Do.....	Susanville .....	7, 040. 70	9, 800 84	9, 800 84	.....
Do.....	Stockton.....	16, 499. 73	34, 104 43	34, 104 43	.....
Do.....	Los Angeles .....	360. 00	850 00	850 00	.....
Do.....	Visalia .....	1, 282. 86	5, 815 28	5, 815 28	.....
Do.....	Shasta .....	3, 322. 19	6, 577 77	6, 577 77	.....
Total.....	.....	98, 850. 45	188, 111 28	188, 111 28	.....
Nevada.....	Carson City.....	765. 59	1, 526 74	1, 526 74	.....
Do.....	Austin.....	225. 31	565 00	565 00	.....
Do.....	Belmont .....	.....	.....	.....	.....
Do.....	Aurora .....	361. 08	451 35	451 35	.....
Total.....	.....	1, 351. 98	2, 543 09	2, 543 09	.....
Minnesota.....	Taylor's Falls.....	2, 514. 17	5, 056 73	4, 571 94	484 79
Do.....	Saint Cloud.....	5, 574. 45	9, 745 25	9, 245 25	500 00
Do.....	Alexandria .....	4, 488. 26	8, 487 33	7, 171 08	1, 316 25
Do.....	Jackson .....	4, 062. 66	11, 766 33	11, 766 33	.....
Do.....	New Ulm.....	1, 660. 31	8, 427 02	8, 427 02	.....
Do.....	Litchfield.....	3, 236. 23	7, 685 82	7, 685 82	.....
Do.....	Du Luth.....	3, 002. 04	7, 387 82	7, 387 82	.....
Total.....	.....	24, 538. 12	58, 556 30	56, 255 26	2, 301 04
Oregon.....	Oregon City.....	7, 707. 79	14, 633 76	14, 633 76	.....
Do.....	Roseburgh.....	12, 109. 08	18, 533 47	18, 533 47	.....
Do.....	Le Grande.....	2, 699. 13	4, 542 87	4, 542 87	.....
Total.....	.....	22, 516. 00	37, 710 10	37, 710 10	.....
Kansas.....	Topeka .....	9, 682. 11	16, 463 09	16, 463 09	.....
Do.....	Humboldt .....	1, 449. 30	2, 741 04	2, 741 04	.....
Do.....	Concordia.....	4, 603. 87	22, 805 71	22, 805 71	.....
Do.....	Angusta.....	9, 039. 05	16, 689 50	13, 845 75	2, 843 75
Do.....	Salina .....	2, 952. 84	16, 278 48	16, 278 48	.....
Total.....	.....	27, 727. 17	74, 977 82	72, 134 07	2, 843 75



number of acres entered under the homestead law of May 20, 1862, &c.—Continued.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the first half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also bounty land scrip, and of cash under homestead act of 1862, and acts amendatory.		Quantity of land located in the first half of said fiscal year, with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
640.00	\$40 00	\$24 00	\$64 00	1,920.00	\$1,664 00	-----	-----	\$916 00
9,462.81	675 00	393 92	1,068 92	20,274.82	16,139 05	5,120.00	\$128 00	2,627 71
5,427.95	435 00	196 76	631 76	29,738.85	32,570 03	-----	-----	3,985 59
19,364.66	1,555 00	811 49	2,366 49	27,308.15	22,228 55	-----	-----	1,965 41
10,470.40	915 00	446 80	1,361 80	43,374.24	43,146 71	-----	-----	2,306 39
20,848.13	1,575 00	1,186 28	2,761 28	29,868.19	15,808 53	-----	-----	2,308 21
474.84	50 00	24 00	74 00	22,000.12	48,558 23	160.00	4 00	1,677 68
25,567.88	1,820 00	918 81	2,738 81	135,574.16	145,878 63	2,720.00	68 00	3,213 01
82,153.86	6,350 00	3,584 14	9,934 14	287,863.71	308,190 68	2,880.00	72 00	15,456 29
12,384.58	835 00	660 00	1,495 00	48,537.40	56,535 26	32,480.00	812 00	2,461 52
8,849.98	775 00	486 83	1,261 83	17,052.11	27,317 05	22,059.11	552 00	3,012 50
9,833.78	815 00	569 51	1,384 51	28,362.29	41,925 11	14,720.00	368 00	3,850 00
1,647.29	110 00	73 82	183 82	9,108.80	9,510 70	5,600.00	140 00	926 71
8,051.41	510 00	302 09	812 09	15,092.11	10,612 93	-----	-----	936 71
22,220.60	1,500 00	1,042 34	2,542 34	38,720.33	36,646 77	31,091.32	768 00	3,407 40
160.00	10 00	6 00	16 00	520.00	866 00	960.00	24 00	440 50
2,790.67	220 00	180 00	400 00	4,073.53	6,215 28	5,640.00	140 00	1,520 10
2,961.58	285 00	190 61	475 61	6,283.77	7,053 38	7,880.00	184 00	1,433 75
68,899.89	5,060 00	3,511 20	8,571 20	167,750.34	196,682 48	120,430.43	2,988 00	17,989 19
1,438.66	95 00	57 00	152 00	2,204.25	1,678 74	1,120.00	28 00	705 56
800.00	50 00	30 00	80 00	1,025.31	645 00	-----	-----	837 65
1,519.88	95 00	61 50	156 50	1,880.96	607 85	1,440.00	36 00	736 81
3,758.54	240 00	148 50	388 50	5,110.52	2,931 59	2,560.00	64 00	2,280 02
12,255.71	995 00	510 20	1,505 20	14,769.88	6,561 93	3,840.00	96 00	1,194 86
26,707.39	2,150 00	1,451 47	3,601 47	32,281.84	13,346 72	3,870.84	88 00	2,918 48
37,784.43	2,615 00	1,227 06	3,842 06	42,272.69	12,329 39	5,245.41	131 14	3,012 40
53,132.77	4,370 00	3,197 91	7,567 91	57,195.43	19,334 24	5,430.62	136 00	3,102 60
50,365.54	4,085 00	2,494 57	6,579 57	51,025.85	15,006 59	3,501.37	92 00	3,063 05
17,526.24	1,865 00	1,275 45	3,140 45	21,762.47	10,826 27	800.00	20 00	3,212 11
5,952.41	480 00	226 83	706 83	8,954.45	8,094 65	7,811.39	196 00	1,770 58
203,724.49	16,560 00	10,383 49	26,943 49	228,262.61	85,499 79	30,499.63	799 14	18,274 08
24,483.02	1,045 00	2,547 42	3,592 42	32,190.81	18,226 18	-----	-----	3,346 37
19,861.74	1,395 00	1,099 96	2,494 96	31,970.82	21,028 43	1,600.00	40 00	3,479 94
9,790.17	680 00	463 91	1,143 91	12,489.30	5,686 78	1,760.00	44 00	1,717 77
54,134.93	3,120 00	4,111 29	7,231 29	76,650.93	44,941 39	3,360.00	84 00	8,544 08
23,012.37	2,395 00	2,318 02	3,713 02	32,694.48	20,176 11	629.05	16 00	3,273 20
5,715.50	545 00	455 45	1,000 45	7,164.80	3,741 49	480.00	12 00	3,497 33
383,147.10	25,005 00	10,408 37	35,513 37	387,750.97	58,319 08	18,161.99	455 22	3,331 55
87,481.67	6,470 00	3,440 34	9,910 34	96,520.72	26,599 84	1,520.00	30 00	3,298 55
135,395.80	10,865 00	5,620 50	16,485 50	138,348.64	32,763 98	11,029.26	276 00	3,430 40
634,752.44	45,380 00	22,242 68	67,622 68	662,479.61	142,600 50	30,820.30	789 22	16,831 03



No. 2.—Statement of public lands sold, of cash and bounty land scrip received therefor,

States and Territories.	Land offices.	Quantity sold for cash and bounty land scrip, at and above the minimum price of \$1 25 per acre, and amounts received for the same, for the first half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the first half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Washington Ter...	Olympia .....	29,794.18	\$44,634 18	\$44,634 18	.....
Do.....	Vancouver.....	3,770.07	7,590 07	7,590 07	.....
Do.....	Walla Walla.....	3,925.53	9,612 50	9,612 50	.....
Total.....	.....	37,489.78	61,836 75	61,836 75	.....
Nebraska.....	West Point .....	1,293.35	4,234 55	4,234 55	.....
Do.....	Beatrice .....	2,837.90	14,663 02	14,663 02	.....
Do.....	Lincoln .....	4,508.09	35,328 19	35,328 19	.....
Do.....	Dakota City .....	71,634.05	90,377 12	90,377 12	.....
Do.....	Grand Island .....	1,109.91	8,078 10	8,078 10	.....
Total.....	.....	81,383.30	152,680 98	152,680 98	.....
New Mexico.....	Santa Fé.....	8,287.12	10,358 91	10,358 91	.....
Dakota Ter.....	Springfield.....	45.73	1,652 14	1,652 14	.....
Do.....	Vermillion.....	1,467.51	6,896 35	6,896 35	.....
Do.....	Pembina.....	461.19	576 50	576 50	.....
Total.....	.....	1,974.43	9,124 99	9,124 99	.....
Colorado Ter.....	Pueblo.....	10,533.55	14,559 26	14,559 26	.....
Do.....	Central City .....	386.53	1,073 62	1,073 62	.....
Do.....	Denver City .....	5,593.91	18,286 40	18,286 40	.....
Do.....	Fair Play .....	243.10	320 00	320 00	.....
Total.....	.....	16,757.09	34,239 28	34,239 28	.....
Idaho Ter.....	Boise City .....	868.05	1,395 61	1,395 61	.....
Do.....	Lewistown.....	658.95	823 68	823 68	.....
Total.....	.....	1,527.00	2,219 29	2,219 29	.....
Wyoming Ter.....	Cheyenne.....	.....	.....	.....	.....

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.



number of acres entered under the homestead law of May 20, 1862, &c.--Continued.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the first half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also bounty land scrip, and of cash under homestead act of 1862, and acts amendatory.		Quantity of land located in the first half of said fiscal year, with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
14,021.39	\$1,245 00	\$802 25	\$2,047 25	43,815.57	\$46,781 43	15,840.00	\$404 00	\$3,479 63
10,113.15	1,000 00	858 60	1,858 60	13,883.22	9,448 67	2,240.00	56 00	2,205 19
6,865.43	505 00	450 75	955 75	10,790.96	10,568 25	.....	.....	1,473 66
30,999.97	2,750 00	2,111 60	4,861 60	68,489.75	66,698 35	18,080.00	460 00	7,158 48
13,326.26	970 00	596 92	1,566 92	14,619.61	5,801 47	1,600.00	40 00	1,888 60
89,818.63	6,895 00	3,927 28	10,822 28	92,656.53	25,485 30	1,114.44	28 00	3,179 50
144,395.26	13,410 00	7,527 22	20,937 22	148,903.35	56,265 41	6,397.65	160 00	3,088 70
25,483.60	1,625 00	717 00	2,342 00	97,117.65	92,719 12	779.40	20 00	3,201 90
71,477.70	6,020 00	3,297 26	9,317 26	72,587.61	17,395 36	4,792.87	119 82	3,177 90
344,501.45	28,920 00	16,065 68	44,985 68	425,884.75	197,666 66	14,684.36	367 82	14,536 60
617.58	40 00	23 16	63 16	8,904.70	10,422 07	.....	.....	816 67
5,705.35	360 00	146 62	506 62	5,751.08	2,158 76	2,400.00	60 00	923 44
51,853.64	3,270 00	1,429 14	4,699 14	53,321.15	11,595 49	26,189.50	656 00	3,044 53
1,440.00	90 00	36 00	126 00	1,901.19	702 50	160.00	4 00	621 61
58,998.99	3,720 00	1,611 76	5,331 76	60,973.42	14,456 75	28,749.50	720 00	4,589 58
8,069.62	505 00	330 00	835 00	18,603.17	15,394 26	12,160.00	304 00	2,103 17
1,111.25	70 00	42 00	112 00	1,497.78	1,185 62	7,335.93	184 00	1,397 57
17,674.27	1,325 00	1,200 00	2,525 00	23,268.18	20,811 40	11,830.40	296 00	2,697 00
160.00	10 00	6 00	16 00	403.10	336 00	.....	.....	382 70
27,015.14	1,910 00	1,578 00	3,488 00	43,772.23	37,727 28	31,326.33	784 00	6,580 44
2,128.02	145 00	85 50	230 50	2,996.07	1,626 11	.....	.....	463 07
2,522.29	160 00	96 00	256 00	3,181.24	1,079 68	.....	.....	538 34
4,650.31	305 00	181 50	486 50	6,177.31	2,705 79	.....	.....	1,001 41
1,425.34	120 00	108 00	228 00	1,425.34	228 00	1,440.00	36 00	913 20

WILLIS DRUMMOND,  
Commissioner.



No. 2.—Statement of public lands sold, of cash and bounty land scrip received therefor,

RECAPIT

States and Territories.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25, and amount received for the same, for the first half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and bounty land scrip, respectively, for the first half of the fiscal year ending June 30, 1872, mentioned in the first column.	
	Acres.	Amount.	Cash.	Bounty land scrip.
Ohio.....	40. 00	\$500 00	\$500 00	.....
Indiana.....	164. 97	206 21	206 21	.....
Illinois.....	.....	.....	.....	.....
Missouri.....	9, 857. 58	17, 304 27	17, 304 27	.....
Alabama.....	172. 74	632 92	632 92	.....
Mississippi.....	.....	307 29	307 29	.....
Louisiana.....	295. 32	2, 745 55	2, 745 55	.....
Michigan.....	82, 370. 67	155, 618 21	155, 318 21	\$300 00
Arkansas.....	216. 23	4, 092 56	4, 092 56	.....
Florida.....	61. 49	637 42	637 42	.....
Iowa.....	8, 278. 32	33, 028 03	33, 028 03	.....
Montana Ter.....	1, 848. 14	5, 999 90	5, 999 90	.....
Arizona Ter.....	1, 280. 00	1, 600 00	1, 600 00	.....
Utah Ter.....	10, 812. 01	15, 070 13	15, 070 13	.....
Wisconsin.....	205, 709. 85	298, 256 54	293, 201 13	5, 055 41
California.....	98, 850. 45	188, 111 23	188, 111 28	.....
Nevada.....	1, 351. 98	2, 543 09	2, 543 09	.....
Minnesota.....	24, 538. 12	58, 556 30	56, 255 26	2, 301 04
Oregon.....	22, 516. 00	37, 710 10	37, 710 10	.....
Kansas.....	27, 727. 17	74, 977 82	72, 134 07	2, 843 75
Washington Ter.....	37, 489. 78	61, 836 75	61, 836 75	.....
Nebraska.....	81, 383. 30	152, 680 98	152, 680 98	.....
New Mexico Ter.....	8, 287. 12	10, 358 91	10, 358 91	.....
Dakota Ter.....	1, 974. 43	9, 124 99	9, 124 99	.....
Colorado Ter.....	16, 757. 09	34, 239 28	24, 239 28	.....
Idaho Ter.....	1, 527. 00	2, 219 29	2, 219 29	.....
Wyoming Ter.....	.....	.....	.....	.....
Total.....	643, 509. 76	1, 168, 357 82	1, 157, 857 62	10, 500 20
To which add number of acres located with agricultural college scrip and commissions thereon..				
Also commissions received on homestead entries as shown in column No. 3 of section 3.....				



number of acres entered under the homestead law of May 20, 1862, &c.—Continued.

## ULATION.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions, under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the first half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also bounty land scrip and of cash, under homestead act of 1862 and acts amendatory.		Quantity of land located in the first half of said fiscal year with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads entries in acres.	Aggregate of \$5 & \$10 payments.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
200.00	\$15 00	\$6 00	\$21 00	240.00	\$521 00			\$616 40
				164.97	206 21			509 94
		2 00	2 00		2 00			708 50
91,034.01	7,455 00	4,224 43	11,679 43	100,891.59	28,983 70	160.00	\$4 00	7,305 24
90,722.91	7,035 00	2,863 00	9,898 00	90,895.65	10,530 92			6,427 98
69,540.53	5,480 00	2,052 01	7,532 01	69,540.53	7,839 30			2,786 58
86,718.31	6,275 00	2,348 29	8,623 29	87,013.63	11,368 84			3,119 90
71,119.40	5,439 00	4,600 02	10,039 02	153,490.07	165,657 23			13,935 97
181,972.43	13,725 00	5,683 22	19,408 22	182,188.66	23,500 78			8,609 25
44,213.65	3,115 00	1,236 00	4,351 00	44,275.14	4,988 42			2,392 08
135,867.01	12,695 00	7,329 25	20,024 25	144,145.33	53,052 28	7,661.59	192 00	5,935 57
15,441.03	975 00	582 00	1,557 00	17,289.17	7,556 90	10,538.75	264 00	2,916 57
640.00	40 00	24 00	64 00	1,920.00	1,664 00			916 00
9,462.81	675 00	393 92	1,068 92	20,274.82	16,139 05	5,120.00	128 00	2,627 71
82,153.86	6,350 00	3,584 14	9,934 14	287,863.71	308,190 68	2,880.00	72 00	15,456 29
68,899.89	5,060 00	3,511 20	8,571 20	167,750.34	196,682 48	120,430.43	2,988 00	17,989 19
3,758.54	240 00	148 50	388 50	5,110.52	2,931 59	2,560.00	64 00	2,280 02
203,724.49	16,560 00	10,383 49	26,943 49	228,262.61	85,499 79	30,499.63	799 14	18,274 08
54,134.93	3,120 00	4,111 29	7,231 29	76,650.93	44,941 39	3,360.00	84 00	8,544 08
634,752.44	45,380 00	22,242 68	67,622 68	662,479.61	142,600 59	30,820.00	789 22	16,831 03
30,999.97	2,750 00	2,111 60	4,861 60	68,489.75	66,698 35	18,080.00	460 00	7,153 48
344,501.45	28,920 00	16,065 68	44,985 68	425,884.75	197,666 66	14,684.36	367 82	14,536 60
617.58	40 00	23 16	63 16	8,904.70	10,422 07			816 67
58,998.99	3,720 00	1,611 76	5,331 76	60,973.42	14,456 75	28,749.50	720 00	4,589 58
27,015.14	1,910 00	1,578 00	3,488 00	43,772.23	37,727 28	31,326.33	784 00	6,580 44
4,650.31	305 00	181 59	486 50	6,177.31	2,705 79			1,001 41
1,425.34	129 00	108 00	228 00	1,425.34	228 00	1,440.00	36 00	913 20
2,312,565.02	177,399 00	97,005 14	274,404 14	2,956,074.78	1,442,761 96	303,310.59	7,752 18	173,778 76
				308,310.59	7,752 18			
					97,005 14			
				3,264,385.37	1,547,519 28			

WILLIS DRUMMOND,  
Commissioner.



No. 3.—Statement of public lands sold, of cash and bounty land scrip received therefor, under sixth section of said act; also of land located with scrip under the agricultural college and thereof, and statement of incidental expenses thereon, in the second half of the fiscal year

States and Territories.	Land offices.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25 per acre, and amount received for the same, for the second half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the second half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Ohio .....	Chillicothe .....	160.00	\$300 00	\$300 00	.....
Indiana .....	Indianapolis .....	1,534.02	2,695 28	2,695 28	.....
Illinois .....	Springfield .....	863.17	1,132 21	1,132 21	.....
Missouri .....	Booneville .....	4,227.23	7,302 77	7,302 77	.....
	Ironton .....	1,248.50	2,585 38	2,585 38	.....
	Springfield .....	2,495.12	4,814 96	4,734 96	\$80 00
Total .....		7,970.85	14,703 11	14,623 11	80 00
Alabama .....	Huntsville .....	39.62	44 18	44 18	.....
	Montgomery .....	3,385.00	143 11	143 11	.....
	Mobile .....	50.09	60 00	60 00	.....
Total .....		114.56	247 29	247 29	.....
Mississippi .....	Jackson .....	55.14	375 86	375 86	.....
Louisiana .....	New Orleans .....	371.04	1,146 50	1,146 50	.....
	Natchitoches .....	57.52	933 91	933 91	.....
Total .....		428.56	2,080 41	2,080 41	.....
Michigan .....	Detroit .....	3,803.11	5,424 82	5,424 82	.....
	East Saginaw .....	14,079.87	26,298 60	26,298 60	.....
	Ionia .....	10,261.26	27,407 18	27,407 18	.....
	Marquette .....	107,459.76	140,717 56	140,517 56	200 00
	Traverse City .....	20,039.95	41,519 38	41,319 38	200 00
Total .....		155,648.95	241,367 54	240,967 54	400 00
Arkansas .....	Little Rock .....	95.69	1,819 77	1,819 77	.....
	Camden .....	55.23	731 12	731 12	.....
	Harrison .....	53.77	557 26	557 26	.....
	Dardanelle .....	72.34	2,474 91	2,474 91	.....
Total .....		277.08	5,583 06	5,583 06	.....
Florida .....	Tallahassee .....	78.45	1,077 17	1,077 17	.....
Iowa .....	Des Moines .....	278.51	348 14	348 14	.....
	Council Bluffs .....	278.71	551 05	551 05	.....
	Fort Dodge .....	1,558.68	3,313 46	3,313 46	.....
	Sioux City .....	3,926.82	26,546 16	26,546 16	.....
Total .....		6,042.72	39,758 81	39,758 81	.....
Montana Ter. ....	Helena .....	4,217.71	7,639 77	7,639 77	.....



ber of acres entered under the homestead law of May 20, 1862, of commissions received under mechanic act of July 2, 1862, and commissions received by registers and receivers on the value commencing July 1, 1871, and ending June 30, 1872.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions, under section 6 of said acts, and of act approved March 21, 1864, amendatory thereof, for the second half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also, bounty land scrip and of cash under homestead act of 1862 and acts amendatory.		Quantity of land located in the second half of said fiscal year, with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
860.74	\$65 00	\$28 86	\$93 86	1,020.74	\$393 86	.....	.....	\$551 84
11,733.45	935 00	497 64	1,432 64	13,267.47	4,127 92	.....	.....	650 92.
2,894.00	10 00	2 00	12 00	892.11	1,144 21	.....	.....	674 63
30,497.59	2,505 00	1,374 85	3,889 85	34,724.82	11,192 62	.....	.....	2,478 62
32,777.32	2,380 00	1,125 04	3,505 04	34,025.82	6,090 42	160.00	\$4 09	1,980 76
29,195.82	2,423 25	1,509 00	3,932 25	31,690.94	8,747 21	.....	.....	1,966 74
92,470.73	7,308 25	4,008 89	11,327 14	100,441.58	26,030 25	160.00	4 00	6,426 12
20,002.41	1,610 00	603 00	2,213 00	20,033.03	2,257 18	.....	.....	2,385 42
31,638.35	2,995 00	1,129 00	4,124 00	31,672.20	4,267 11	.....	.....	2,025 26
20,398.69	10,510 00	583 00	11,093 00	20,448.78	11,153 00	.....	.....	1,126 59
72,039.45	15,115 00	2,315 00	17,430 00	72,154.01	17,677 29	.....	.....	5,537 27
67,160.15	4,900 10	1,800 05	6,700 15	67,215.29	7,090 86	.....	.....	2,450 72
43,469.71	3,040 00	1,181 98	4,221 98	43,840.75	5,368 48	.....	.....	2,346 62
11,660.32	1,090 00	409 89	1,499 89	11,717.84	2,433 80	.....	.....	1,361 22
55,130.03	4,130 00	1,591 87	5,721 87	55,558.59	7,802 28	.....	.....	3,707 84
3,513.29	240 00	140 58	380 58	7,321.40	5,805 40	.....	.....	1,018 15
9,575.94	695 00	416 68	1,111 68	23,655.81	27,410 28	.....	.....	.....
17,286.84	1,525 00	1,331 01	2,856 01	27,548.10	30,263 19	.....	.....	3,180 62
6,639.12	375 00	222 16	597 16	114,098.88	141,314 72	.....	.....	3,075 35
24,217.78	2,180 00	1,573 77	3,753 77	44,257.73	45,273 15	.....	.....	3,890 23
61,232.97	5,015 00	3,684 20	8,699 20	216,881.92	250,066 74	.....	.....	13,867 98
52,494.57	4,480 00	1,703 69	6,193 69	52,590.26	8,013 46	.....	.....	3,653 83
31,728.09	2,256 00	842 11	3,098 11	31,783.37	3,829 23	.....	.....	1,555 14
55,909.65	4,070 00	1,494 98	5,564 98	55,963.42	6,122 24	.....	.....	2,317 45
44,518.42	3,470 00	1,276 49	4,746 49	44,590.76	7,221 40	.....	.....	1,617 21
184,650.73	14,286 00	5,317 27	19,603 27	184,927.81	25,186 33	.....	.....	9,143 63
36,566.15	2,680 00	1,047 00	3,727 00	36,644.60	4,804 17	.....	.....	2,108 96
676.05	85 00	5,790 00	142 90	954.56	991 04	.....	.....	620 93
2,562.92	270 00	781 00	421 00	2,841.63	972 05	.....	.....	644 32
9,369.96	920 00	677 26	1,597 26	10,928.64	4,910 72	480.00	12 00	1,342 16
116,141.41	11,175 00	4,877 00	17,052 00	120,068.23	43,598 16	6,720.00	168 00	3,042 00
123,750.34	12,450 00	6,393 26	19,213 16	134,793.06	49,971 97	7,200.00	180 00	5,649 41
11,694.52	765 00	465 00	1,230 00	13,912.23	8,869 77	16,640.00	416 00	2,142 90



No. 3.—Statement of public lands sold, of cash and bounty land scrip received therefor,

States and Territories.	Land offices.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25 per acre, and amount received for the same, for the second half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the second half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Arizona Ter.....	Prescott .....	1, 140. 70	\$1, 503 45	\$1, 503 45	.....
Utah Ter.....	Salt Lake City.....	22, 657. 86	32, 708 18	32, 708 18	.....
Wisconsin .....	Menasha.....	24, 334. 14	30, 543 87	30, 034 54	\$509 33
	Falls Saint Croix .....	11, 915. 29	28, 140 89	28, 140 89	.....
	Stevens Point.....	53, 417. 99	67, 109 91	66, 261 04	848 87
	La Crosse.....	6, 895. 68	10, 488 35	10, 488 35	.....
	Bayfield .....	18, 626. 43	46, 850 07	46, 850 07	.....
	Eau Claire.....	39, 775. 17	51, 053 29	50, 892 36	160 93
Total.....		154, 964. 70	234, 186 38	232, 667 25	1, 519 13
California .....	San Francisco .....	94, 713. 71	127, 980 28	127, 980 28	.....
	Sacramento .....	9, 312. 02	30, 522 53	30, 522 53	.....
	Marysville.....	18, 497. 15	47, 285 61	47, 285 61	.....
	Humboldt .....	8, 099. 88	10, 724 85	10, 724 85	.....
	Susanville .....	6, 671. 73	9, 650 53	9, 650 53	.....
	Stockton .....	9, 599. 45	27, 643 56	27, 643 56	.....
	Los Angeles .....	1, 374. 53	2, 780 55	2, 780 55	.....
	Visalia.....	6, 172. 86	14, 511 81	14, 511 81	.....
	Shasta .....	1, 768. 68	4, 977 81	4, 977 81	.....
Total.....		156, 210. 01	276, 077 53	276, 077 53	.....
Nevada .....	Carson City.....	2, 132. 88	2, 984 83	2, 984 83	.....
	Austin.....	593. 30	870 00	870 00	.....
	Belmont .....				.....
	Aurora .....	327. 69	809 61	809 61	.....
Total.....		3, 053. 87	4, 664 44	4, 664 44	.....
Minnesota.....	Taylor's Falls.....	2, 798. 10	5, 183 17	5, 183 17	.....
	Saint Cloud .....	2, 733. 81	5, 288 46	5, 288 46	.....
	Alexandria .....	4, 964. 34	9, 036 63	9, 036 63	.....
	Jackson .....	5, 500. 97	17, 567 61	17, 567 61	.....
	New Ulm .....	1, 433. 44	5, 233 87	5, 233 87	.....
	Litchfield .....	2, 216. 92	6, 628 35	6, 628 35	.....
	Du Luth.....	21, 795. 71	33, 429 37	33, 129 37	300 00
Total.....		41, 443. 29	82, 367 46	82, 067 46	300 00
Oregon .....	Oregon City .....	4, 392. 10	7, 845 03	7, 845 03	.....
	Roseburgh .....	28, 116. 66	37, 203 22	37, 203 22	.....
	Le Grande .....	3, 781. 32	6, 286 86	6, 286 86	.....
Total.....		36, 290. 08	51, 335 11	51, 335 11	.....
Kansas .....	Topeka .....	17, 496. 03	28, 051 51	28, 051 51	.....
	Independence.....	2, 373. 07	4, 018 96	4, 018 96	.....
	Concordia.....	3, 222. 68	15, 143 19	15, 143 19	.....
	Wichita .....	6, 613. 71	15, 438 77	15, 438 77	.....
	Salina .....	5, 460. 30	21, 930 35	21, 930 35	.....
Total.....		35, 165. 79	84, 582 78	84, 582 78	.....



Number of acres entered under the homestead law of May 20, 1862, &c.—Continued.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of registers' and receivers' commissions, under section 6 of said acts, and of act approved March 21, 1864, amendatory thereof, for the second half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also, bounty land scrip and of cash under homestead act of 1862 and acts amendatory.		Quantity of land located in the second half of said fiscal year, with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
637.03	\$40 00	\$24 00	\$64 00	1,777.73	\$1,567 45	160.00	\$4 00	\$1,067 04
41,033.10	2,900 00	1,706 23	4,606 23	63,690.96	37,314 41	31,360.00	784 00	2,884 62
4,713.40	350 00	167 10	517 10	29,047.54	31,060 97	.....	.....	3,060 45
14,022.95	1,230 00	857 57	2,087 57	25,938.24	30,228 46	.....	.....	2,402 99
11,875.18	925 00	521 87	1,446 87	65,293.17	68,556 78	.....	.....	2,148 05
19,859.28	1,490 00	940 50	2,430 50	26,754.96	12,918 85	.....	.....	1,890 30
880.00	90 00	48 00	138 00	19,506.43	46,988 07	3,680.00	91 96	2,465 53
18,658.58	1,470 00	779 19	2,249 19	58,433.75	53,302 48	4,640.00	116 00	3,626 27
70,009.39	5,555 00	3,314 23	8,869 23	224,974.09	243,055 61	8,320.00	207 96	15,593 59
57,742.72	615 00	462 50	1,077 50	152,456.43	129,057 78	39,520.00	984 00	3,362 50
34,662.90	725 00	483 90	1,208 90	43,974.92	31,731 43	22,240.00	552 00	3,000 00
9,058.36	810 00	647 06	1,457 05	27,555.51	48,742 66	22,168.00	556 00	3,652 50
4,054.68	260 00	186 52	446 52	12,154.56	11,171 37	3,040.00	76 00	1,425 42
8,336.16	540 00	320 27	860 27	15,007.89	10,510 80	320.00	8 00	1,864 05
18,204.83	1,190 00	814 46	2,004 46	27,804.28	29,648 02	24,640.00	596 00	3,671 68
236.47	20 00	12 00	32 00	1,611.00	2,812 55	1,120.00	28 00	365 30
6,683.63	545 00	537 00	1,082 00	12,856.49	15,593 81	12,800.00	508 00	3,296 99
1,910.29	195 00	121 50	316 50	3,678.97	5,294 31	2,300.00	60 00	1,194 47
140,890.04	4,900 00	3,585 21	8,485 20	297,100.05	284,562 73	128,148.00	3,368 00	21,832 91
720.00	80 00	48 00	128 00	2,852.88	3,112 83	.....	.....	1,084 07
2,785.24	220 00	132 00	360 00	3,378.54	1,230 00	.....	.....	1,420 61
600.00	40 00	22 50	62 50	927.69	872 11	1,440.00	36 00	876 95
4,105.24	340 00	202 50	550 50	7,159.11	5,214 94	1,440.00	36 00	3,381 63
8,285.52	670 00	424 24	1,094 24	11,083.62	6,277 41	.....	.....	1,604 39
31,548.43	2,510 00	1,748 70	4,358 70	34,282.24	9,647 16	5,600.00	140 00	3,136 50
38,500.27	2,980 00	1,442 91	4,422 91	43,464.61	13,459 54	8,315.50	211 32	3,125 03
76,649.29	6,330 00	3,953 66	10,283 66	82,150.26	27,851 27	3,040.00	76 00	3,054 00
63,616.45	5,045 00	3,363 14	8,008 14	65,049.89	13,242 01	2,880.00	72 00	2,887 10
27,760.37	2,690 00	1,842 90	4,532 90	29,977.29	11,161 25	1,120.00	28 00	3,101 15
3,814.00	335 00	151 02	486 02	25,609.71	33,915 39	9,920.00	248 00	1,864 10
250,174.33	20,560 00	12,926 57	33,186 57	291,617.62	115,554 03	30,875.50	775 32	18,772 27
15,112.09	1,375 00	1,151 99	2,526 99	19,504.19	10,372 02	.....	.....	3,249 74
24,396.56	1,690 00	1,196 95	2,886 95	52,513.22	40,090 17	9,320.00	266 00	3,022 06
7,379.40	480 00	358 58	838 58	11,160.72	7,125 44	2,080.00	48 00	2,130 78
46,888.05	3,545 00	2,707 52	6,252 52	83,178.13	57,587 63	11,400.00	314 00	8,402 58
28,312.94	2,935 00	1,543 78	3,078 78	45,808.97	31,130 29	160.00	4 00	3,180 00
11,081.24	925 00	573 43	1,498 43	13,454.31	5,517 39	.....	.....	3,802 99
336,806.25	21,920 00	9,271 96	31,191 96	336,028.93	46,335 15	29,160.00	900 00	3,296 60
78,711.50	5,660 00	3,083 30	8,743 30	85,325.21	24,182 07	1,440.00	15 00	3,554 80
141,711.67	11,860 00	6,190 66	18,050 66	147,171.97	39,981 01	8,640.00	216 00	3,211 60
592,623.60	43,300 00	20,662 13	63,963 13	627,789.39	148,545 91	39,400.00	1,125 00	17,045 99



No. 3.—Statement of public lands sold, of cash and bounty land scrip received therefor,

States and Terri- tories.	Land offices.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25 per acre, and amount received for the same, for the second half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and in bounty land scrip, respectively, for the second half of the fiscal year ending June 30, 1872, mentioned in the first column.	
		Acres.	Amount.	Cash.	Bounty land scrip.
Washington Ter ...	Olympia .....	21, 457. 09	\$32, 513 34	\$32, 513 34	.....
	Vancouver.....	991. 44	2, 148 16	2, 148 16	.....
	Walla Walla .....	4, 463. 25	8, 446 64	8, 446 64	.....
	Total.....	26, 911. 78	43, 108 14	43, 108 14	.....
Nebraska .....	West Point .....	2, 074. 13	6, 035 02	6, 035 02	.....
	Beatrice .....	1, 582. 44	6, 928 94	6, 928 94	.....
	Lincoln .....	7, 104. 94	45, 926 92	45, 926 92	.....
	Dakota City .....	18, 168. 99	23, 361 35	23, 211 35	\$150 00
	Grand Island .....	1, 559. 49	13, 714 34	13, 714 34	.....
	Total.....	30, 489. 99	95, 966 57	95, 816 57	150 00
New Mexico .....	Santa Fé.....	7, 307. 43	9, 134 29	9, 134 29	.....
Dakota Ter.....	Springfield.....	654. 58	818 17	818 17	.....
	Vermillion.....	2, 740. 34	5, 501 55	5, 501 55	.....
	Pembina.....	607. 90	954 87	954 87	.....
	Total.....	4, 002. 82	7, 274 59	7, 274 59	.....
Colorado Ter .....	Pueblo .....	21, 744. 12	28, 684 52	28, 684 52	.....
	Central City .....	726. 00	1, 565 00	1, 565 00	.....
	Denver City .....	4, 489. 60	10, 844 67	10, 844 67	.....
	Fair Play .....	489. 65	660 00	660 00	.....
	Total.....	27, 449. 37	41, 754 19	41, 754 19	.....
Idaho Ter .....	Boise City .....	1, 205. 27	1, 506 51	1, 506 51	.....
	Lewiston .....	966. 22	1, 207 77	1, 207 77	.....
	Total.....	2, 171. 49	2, 714 28	2, 714 28	.....
Wyoming Ter.....	Cheyenne .....	160. 00	999 47	999 47	.....

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.



number of acres entered under the homestead law of May 20, 1862, &c.—Continued.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts, and also with aggregate of registers' and receivers' commissions, under section 6 of said acts, and of act approved March 21, 1864, amendatory thereof, for the second half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also, bounty land scrip and of cash under homestead act of 1862 and acts amendatory.		Quantity of land located in the second half of said fiscal year, with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Fees.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
10,666.99	\$935 00	\$737 00	\$1,672 00	32,124.08	\$34,185 34	4,480.00	\$108 00	\$3,507 65
8,164.69	800 00	629 22	1,429 22	9,156.13	3,577 38	480.00	12 00	2,110 82
6,365.41	535 00	488 36	1,023 36	10,828.66	9,470 00	-----	-----	1,008 94
25,197.09	2,270 00	1,854 58	4,124 58	52,108.87	47,232 72	4,960.00	120 00	6,627 41
20,793.33	1,585 00	965 08	2,550 08	22,867.46	8,585 10	3,840.00	96 00	2,461 64
63,059.17	4,850 00	3,038 48	7,888 48	64,641.61	14,817 42	3,840.00	96 00	3,138 50
130,992.39	12,872 00	7,010 10	19,882 10	138,097.33	65,809 02	7,193.98	180 00	3,125 79
42,097.48	2,050 00	893 00	2,943 00	60,266.47	26,304 35	11,828.38	293 00	3,023 60
83,603.23	7,020 00	3,671 06	10,691 06	85,162.72	24,405 40	7,520.00	186 77	3,103 40
340,545 60	28,377 00	15,577 72	43,954 72	371,035.59	139,921 29	34,222.36	851 77	14,852 93
760.00	55 00	30 00	85 00	8,067.43	9,219 29	1,280.00	32 00	988 43
6,568.36	415 00	168 98	583 98	7,222.94	1,402 15	5,280.00	132 00	1,228 40
90,549.98	5,740 00	2,416 20	8,156 20	93,290.32	13,657 75	25,000.00	1,000 00	3,066 98
1,120.00	70 00	28 00	98 00	1,727.90	1,052 87	-----	-----	577 08
98,238.34	6,225 00	2,613 18	8,838 18	102,241.16	16,112 77	30,280.00	1,132 00	4,872 46
6,217.39	395 00	312 00	707 00	27,961.51	29,391 52	25,497.12	660 00	3,513 32
959.60	60 00	42 00	102 00	1,685.60	1,667 00	2,240.00	56 00	952 42
12,387.26	1,040 00	828 00	1,868 00	16,876.86	12,712 67	9,119.50	224 00	2,841 08
-----	-----	-----	-----	489.65	660 00	640.00	16 00	534 20
19,564.25	1,495 00	1,182 00	2,677 00	47,013.62	44,431 19	37,496.62	956 00	7,841 04
1,829.15	125 00	75 00	200 00	3,034.42	1,706 51	-----	-----	427 06
3,793.71	250 00	144 00	384 00	4,759.93	1,591 77	-----	-----	888 72
5,622.86	365 00	219 00	584 00	7,794.35	3,298 25	-----	-----	1,315 78
160.00	10 00	12 00	22 00	320.00	1,021 47	960.00	24 00	858 44

WILLIS DRUMMOND,  
Commissioner.



No. 3.—Statement of the public lands sold, of cash and bounty land scrip received therefor,

RECAPIT

States and Territories.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25, and amount received for the same, for the second half of the fiscal year ending June 30, 1872.		Exhibit of the amount paid in cash and bounty land scrip, respectively, for the second half of the fiscal year ending June 30, 1872, mentioned in the first column.	
	Acres.	Amount.	Cash.	Bounty land scrip.
Ohio.....	160.00	\$300 00	\$300 00	.....
Indiana.....	1,534.02	2,695 28	2,695 28	.....
Illinois.....	863.17	1,132 21	1,132 21	.....
Missouri.....	7,970.85	14,703 11	14,623 11	\$80 00
Alabama.....	114.56	247 29	247 29	.....
Mississippi.....	55.14	375 86	375 86	.....
Louisiana.....	428.56	2,080 41	2,080 41	.....
Michigan.....	155,648.95	241,367 54	240,967 54	400 00
Arkansas.....	277.08	5,583 06	5,583 06	.....
Florida.....	78.45	1,077 17	7,077 17	.....
Iowa.....	6,042.72	30,758 81	30,758 81	.....
Montana Territory.....	4,217.71	7,639 77	7,639 77	.....
Arizona Territory.....	1,140.70	1,503 45	1,503 45	.....
Utah Territory.....	22,657.86	32,708 18	32,708 18	.....
Wisconsin.....	154,964.70	234,186 38	232,667 25	1,519 13
California.....	156,210.01	276,077 53	276,077 53	.....
Nevada.....	3,053.87	4,664 44	4,664 44	.....
Minnesota.....	41,443.29	82,367 46	82,067 46	300 00
Oregon.....	36,290.08	51,335 11	51,335 11	.....
Kansas.....	35,165.79	84,582 78	84,582 78	.....
Washington Territory.....	26,911.78	43,108 14	43,108 14	.....
Nebraska.....	30,489.99	95,966 57	95,816 57	150 00
New Mexico Territory.....	7,307.43	9,134 29	9,134 29	.....
Dakota Territory.....	4,002.82	7,274 59	7,274 59	.....
Colorado Territory.....	27,449.37	41,754 19	41,754 19	.....
Idaho Territory.....	2,171.49	2,714 28	2,714 28	.....
Wyoming Territory.....	160.00	999 47	999 47	.....
Total.....	726,810.39	1,276,337 37	1,273,888 24	2,449 13
To which add number of acres located with agricultural college scrip and commissions Also commissions received on homestead entries, as shown in column No. 3 of section 3.				
Total.....				



number of acres entered under the homestead law of May 20, 1862, &c.—Continued.

ULATION.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts, and also with aggregate of registers' and receivers' commissions, under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the second half of the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also bounty land scrip and of cash under homestead act of 1862, and acts amendatory.		Quantity of land located in the second half of said fiscal year with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Aggregate of \$5 and \$10 payments.	Amount of registers' and receivers' commissions.	Aggregate of fees and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
860.74	\$65 00	\$28 86	\$93 86	1,020.74	\$393 86	-----	-----	\$551 84
11,733.45	935 00	497 64	1,432 64	13,267.47	4,127 92	-----	-----	650 92
2,894.00	10 00	2 00	12 00	892.11	1,144 21	-----	-----	674 63
92,470.73	7,308 25	4,008 89	11,327 14	100,441.58	26,030 25	160.00	\$4 00	6,426 12
72,039.45	15,115 00	2,315 00	17,430 00	72,154.01	17,677 29	-----	-----	5,537 27
67,160.15	4,900 10	1,800 05	6,700 15	67,215.29	7,090 86	-----	-----	2,450 72
55,130.03	4,130 00	1,591 87	5,721 87	55,558.59	7,802 28	-----	-----	3,707 84
61,232.97	5,015 00	3,684 20	8,699 20	216,881.92	250,066 74	-----	-----	13,867 98
184,650.73	14,286 00	5,317 27	19,603 27	184,927.81	25,186 33	-----	-----	9,143 63
36,566.15	2,680 00	1,047 00	3,727 00	36,644.60	4,804 17	-----	-----	2,108 96
128,750.34	12,450 00	6,393 16	19,213 16	134,793.06	49,971 97	7,200.00	180 00	5,649 41
11,694.52	765 00	465 00	1,230 00	15,912.23	8,869 77	16,640.00	416 00	2,142 90
637.03	40 00	24 00	64 00	1,777.73	1,567 45	160.00	4 00	1,067 04
41,033.10	2,900 00	1,706 23	4,606 23	63,690.96	37,314 41	31,360.00	784 00	2,884 62
70,009.39	5,555 00	3,314 23	8,869 23	224,974.09	243,055 61	8,320.00	207 96	15,593 59
140,890.04	4,900 00	3,585 21	8,485 20	297,100.05	284,562 73	128,148.00	3,368 00	21,832 91
4,105.24	340 00	202 50	550 50	7,159.11	5,214 94	1,440.00	36 00	3,381 63
250,174.33	20,560 00	12,926 57	33,186 57	291,617.62	115,554 03	30,875.50	775 32	18,772 27
46,888.05	3,545 00	2,707 52	6,252 52	83,178.13	57,587 63	11,400.00	314 00	8,402 58
592,623.60	43,300 00	20,663 13	63,963 13	627,789.39	148,545 91	39,400.00	1,125 00	17,045 99
25,197.09	2,270 00	1,854 58	4,124 58	52,108.87	47,232 72	4,960.00	120 00	6,627 41
340,545.60	28,377 00	15,577 72	43,954 72	371,035.59	139,921 29	34,222.36	851 77	14,852 93
760.00	55 00	30 00	85 00	8,067.43	9,219 29	1,280.00	32 00	988 43
98,238.34	6,225 00	2,613 18	8,838 18	102,241.16	16,112 77	30,280.00	1,132 00	4,872 46
19,564.25	1,495 00	1,182 00	2,677 00	47,013.62	44,431 19	37,496.62	956 00	7,841 04
5,622.86	365 00	219 00	584 00	7,794.35	3,298 25	-----	-----	1,315 78
160.00	10 00	12 00	22 00	320.00	1,021 45	960.00	24 00	858 44
2,358,767.12	187,706 25	93,153 75	280,860 00	3,085,577.51	1,557,197 37	384,302.48	10,330 05	179,249 34
thereon-----	-----	-----	-----	384,302.48	10,330 05	-----	-----	-----
-----	-----	-----	-----	-----	93,153 75	-----	-----	-----
-----	-----	-----	-----	3,469,879.99	1,660,681 17	-----	-----	-----

WILLIS DRUMMOND,  
Commissioner.



No. 4.—*Summary for the fiscal year ending June 30, 1872, showing the number of acres dis March 21, 1864, and June 21, 1866, with aggregate of \$5 and \$10 homestead payments and*

States and Territories.	Quantity sold for cash and bounty land scrip at and above the minimum price of \$1.25, and amount received for the same, for the fiscal year ending June 30, 1872.		Exhibit of the amount paid for in cash and in bounty land scrip, respectively, for the fiscal year ending June 30, 1872, mentioned in the first column.	
	Acres.	Amount.	Cash.	Military scrip.
Ohio.....	200.00	\$800 00	\$800 00	.....
Indiana.....	1,698.99	2,901 49	2,901 49	.....
Illinois.....	863.17	1,132 21	1,132 21	.....
Missouri.....	17,828.43	32,007 38	31,927 38	\$80 00
Alabama.....	287.30	880 21	880 21	.....
Mississippi.....	55.14	683 15	683 15	.....
Louisiana.....	723.88	4,825 96	4,825 96	.....
Michigan.....	238,019.62	396,985 75	396,285 75	700 00
Arkansas.....	493.31	9,675 62	9,675 62	.....
Florida.....	139.94	1,714 59	1,714 59	.....
Iowa.....	14,231.04	63,786 84	63,786 84	.....
Montana Territory.....	6,065.85	13,639 67	13,639 67	.....
Arizona Territory.....	2,420.70	3,103 45	3,103 45	.....
Utah Territory.....	33,469.87	47,778 31	47,778 31	.....
Wisconsin.....	360,674.55	532,442 92	525,868 38	6,574 54
California.....	255,060.46	464,188 81	464,188 81	.....
Nevada.....	4,405.85	7,207 53	7,207 53	.....
Minnesota.....	65,981.41	140,923 76	138,322 72	2,601 04
Oregon.....	58,806.08	89,045 21	89,045 21	.....
Kansas.....	62,892.96	159,560 60	156,716 85	2,843 75
Washington Territory.....	64,401.56	104,944 89	104,944 89	.....
Nebraska.....	111,873.29	248,647 55	248,497 55	150 00
New Mexico Territory.....	15,594.55	19,493 20	19,493 20	.....
Dakota Territory.....	5,977.25	16,399 58	16,399 58	.....
Colorado Territory.....	44,206.46	75,993 47	75,993 47	.....
Idaho Territory.....	3,698.49	4,933 57	4,933 57	.....
Wyoming Territory.....	160.00	999 47	999 47	.....
Totals.....	1,370,320.15	2,444,695 19	2,431,745 86	12,949 33

To which add number of acres located with agricultural college scrip, and commissions  
Also, commissions received on homestead entries, as shown in column No. 3 of section 3



posed of for cash, with bounty land scrip, by entry under the homestead laws of May 20, 1862, homestead commissions; also, locations with agricultural college scrip under act of July 2, 1862.

Quantity of land entered under homestead acts of May 20, 1862, and June 21, 1866, with aggregate of \$5 and \$10 payments required by section 2 of the acts; and also with aggregate of commissions of registers and receivers under section 6 of said act, and of act approved March 21, 1864, amendatory thereof, for the fiscal year ending June 30, 1872.				Aggregate disposed of for cash; also, bounty land scrip, and of cash under homestead act of 1862, and acts amendatory.		Quantity of land located in the said fiscal year with agricultural college scrip, act July 2, 1862, and registers' and receivers' commissions on value of land located.		Incidental expenses.
Area of homesteads in acres.	Aggregate of \$5 and \$10 payments.	Aggregate of registers' and receivers' commissions.	Aggregate of fees, and registers' and receivers' commissions.	Acres.	Amount.	Acres.	Amount.	Amount.
1,060.74	\$80 00	\$34 86	\$114 86	1,260.74	\$914 86	.....	.....	\$1,168 24
11,733.45	935 00	497 64	1,432 64	13,432.44	4,334 13	.....	.....	1,160 86
28.94	10 00	4 00	14 00	892.11	1,146 21	.....	.....	1,383 13
183,504.74	14,763 25	8,243 32	23,006 57	201,333.17	55,013 95	320.00	\$8 00	13,731 36
162,762.36	22,150 00	5,178 00	27,328 00	163,049.66	28,208 21	.....	.....	11,965 25
136,700.68	10,390 00	3,857 01	14,247 01	136,755.82	14,930 16	.....	.....	5,237 30
141,848.34	10,405 00	3,940 16	14,345 16	142,572.22	19,171 12	.....	.....	6,827 74
132,352.37	10,454 00	8,284 22	18,738 22	370,371.99	415,723 97	.....	.....	27,803 95
366,623.16	28,011 00	11,000 49	39,011 49	367,116.47	48,687 11	.....	.....	17,752 88
80,779.80	5,795 00	2,283 00	8,078 00	80,919.74	9,792 59	.....	.....	4,501 04
264,617.35	25,145 00	13,092 41	38,237 41	278,938.39	102,024 25	14,861.59	372 00	11,584 98
27,135.55	1,740 00	1,047 00	2,787 00	33,201.40	16,426 67	27,178.75	680 00	5,059 47
1,277.03	80 00	48 00	128 00	3,697.73	3,231 45	160.00	4 00	1,983 04
50,495.91	3,575 00	2,100 15	5,675 15	83,965.78	53,453 46	36,480.00	912 00	5,512 33
152,163.25	11,905 00	6,898 37	18,803 37	512,837.80	551,246 29	11,200.00	279 96	31,049 38
209,789.93	9,960 00	7,096 40	17,056 40	464,850.39	481,245 21	248,578.43	6,356 00	39,822 10
7,863.78	580 00	351 00	931 00	12,269.63	8,138 53	4,000.00	100 00	5,661 65
453,898.82	37,220 00	23,310 06	60,530 06	519,880.23	201,453 82	61,375.13	1,574 46	37,046 35
101,022.98	6,665 00	6,818 81	13,483 81	159,829.06	102,529 02	14,760.00	398 00	16,946 66
1,227,376.04	88,680 00	42,905 81	131,585 81	1,290,269.00	291,146 41	70,220.00	1,914 22	33,877 02
56,197.06	5,020 00	3,966 18	8,986 18	120,598.62	113,931 07	23,040.00	580 00	13,785 89
685,047.05	57,297 00	31,643 40	88,940 40	796,920.34	337,587 95	48,906.72	1,219 59	29,389 53
1,377.53	95 00	53 16	148 16	16,972.13	19,641 36	1,280.00	32 00	1,805 10
157,237.33	9,945 00	4,224 94	14,169 94	163,214.58	30,569 52	59,029.50	1,852 00	9,462 04
46,579.39	3,405 00	2,760 00	6,165 00	90,785.85	82,153 47	68,822.95	1,740 00	14,421 48
10,273.17	670 00	400 50	1,070 50	13,971.66	6,004 07	.....	.....	2,317 19
1,585.34	130 00	120 00	250 00	1,745.34	1,249 47	2,400.00	60 00	1,771 64
4,671,332.14	365,105 25	190,158 89	555,264 14	6,041,652.29	2,999,959 33	692,613.07	18,082 23	353,028 10
thereon .....	.....	.....	.....	692,613.07	18,082 23	.....	.....	.....
.....	.....	.....	.....	.....	190,158 89	.....	.....	.....
.....	.....	.....	.....	6,733,265.36	3,208,100 45	.....	.....	.....

WILLIS DRUMMOND, *Commissioner.*



# REPORT OF THE COMMISSIONER OF SWAMP LANDS.

No. 5.—Statement exhibiting the quantity of land selected for the several States under acts of Congress approved March 2, 1849, September 28, 1850, and March 12, 1860, to September 30, 1872.

States.	Fourth quarter, 1871.	First quarter, 1872.	Second quarter, 1872.	Third quarter, 1872.	Year ending June 30, 1872.	Total since date of grant.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Ohio .....						54,438.14
Indiana .....						1,354,732.50
Illinois .....						3,267,470.65
Missouri .....						4,604,448.75
Alabama .....						479,514.44
Mississippi .....						3,070,645.29
Louisiana, (act of 1849) .....						10,774,978.82
Louisiana, (act of 1850) .....						543,339.13
Michigan .....						7,273,724.72
Arkansas .....						8,652,432.93
Florida .....						11,790,637.46
Wisconsin .....						4,200,669.58
Iowa .....		866,210.46			866,210.46	3,449,720.18
California .....	19,998.38		323,507.55	159.00	388,518.12	1,502,291.73
Minnesota .....	147,181.46				147,181.46	1,276,955.47
Total .....	167,179.84	866,210.46	323,507.55	159.00	1,401,910.04	62,428,412.88

No. 6.—Statement exhibiting the quantity of land approved to the several States under the acts of Congress approved March 2, 1849, September 28, 1850, and March 12, 1860, to September 30, 1872.

States.	Fourth quarter, 1871.	First quarter, 1872.	Second quarter, 1872.	Third quarter, 1872.	Year ending June 30, 1872.	Total since date of grant.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Ohio .....						25,640.71
Indiana .....			23.40		23.40	1,263,756.68
Illinois .....		180.00			220.00	1,491,791.76
Missouri .....	80.00			838.19	624.95	4,333,479.40
Alabama .....						400,434.78
Mississippi .....						3,068,642.31
Louisiana, (act of 1849) .....			1,275.40		4,006.23	8,197,345.95
Louisiana, (act of 1850) .....						238,980.46
Michigan .....				1,547.87		5,693,506.53
Arkansas .....	128,929.02		53,753.10	3,412.07	283,486.11	7,574,126.01
Florida .....				234.12		10,901,241.88
Wisconsin .....						3,114,455.08
Iowa .....	120.00	1,086.69	631.78	475.62	1,838.67	884,071.42
California .....	19,998.38		323,507.55	159.00	388,518.12	1,357,980.05
Minnesota .....		27,529.62			35,537.71	953,910.34
Total .....	149,127.40	28,796.51	379,191.23	6,666.87	714,255.19	49,499,363.36



No. 7.—Statement exhibiting the quantity of land patented to the several States under the acts of Congress approved September 28, 1850, and March 12, 1860; and also the quantity certified to Louisiana under act approved March 2, 1849.

States.	Fourth quarter, 1871.	First quarter, 1872.	Second quarter, 1872.	Third quarter, 1872.	Year ending, June 30, 1872.	Total since date of grant.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Ohio .....						25,640.71
Indiana .....				23.40		*1,256,511.96
Illinois .....		2,185.58	180.00		2,365.58	†1,452,171.43
Missouri .....	2,309.19		160.00		2,469.19	3,157,072.97
Alabama .....						392,719.61
Mississippi .....						2,681,383.16
Louisiana, (act of 1849) .....			1,275.40		3,979.23	8,197,345.95
Louisiana, (act of 1850) .....						216,523.72
Michigan .....			80.00	40.00	80.00	‡5,837,068.82
Arkansas .....						6,758,488.10
Florida .....		29,657.80	2,793.25		32,451.05	10,676,919.09
Wisconsin .....	27,923.43	45,135.36			73,058.79	§3,046,116.05
Iowa .....	1,880.00		200.00	1,106.89	2,080.00	1,148,490.21
California .....	57,147.45		21,260.74	210,194.08	78,408.19	1,076,502.61
Minnesota .....		69,426.35			69,426.35	826,936.70
Total .....	89,260.07	146,405.09	25,949.39	211,364.37	264,318.38	46,749,891.09

\* 4,880.20 acres of this contained in indemnity patents under act of March 2, 1855.

† 1,108.83 acres of this contained in indemnity patents under act of March 2, 1855.

‡ 18,823.93 acres of this contained in indemnity patents under act of March 2, 1855.

§ 39,910.75 acres of this contained in indemnity patents under act of March 2, 1855.

|| 320,908.23 acres of this contained in indemnity patents under act of March 2, 1855.

WILLIS DRUMMOND, *Commissioner*.

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.

No. 8.—Statement showing the condition of the State selections under the act of September 4, 1841, to the 30th day of June, 1872.

States.	Number of acres to which each State was entitled under the eighth section of the act of September 4, 1841.	Number of acres approved up to June 30, 1872.	Number of acres remain- ing to each State, to be selected on the 1st of July, 1872.
Illinois .....	209,085.50	*209,060.05	25.45
Missouri .....	500,000.00	500,000.00	
Alabama .....	97,469.17	*97,469.17	
Mississippi .....	500,000.00	500,000.00	
Louisiana .....	500,000.00	482,166.97	17,833.63
Michigan .....	500,000.00	498,638.54	1,361.46
Arkansas .....	500,000.00	499,880.03	119.97
Florida .....	499,990.00	450,823.82	49,166.18
Iowa .....	500,000.00	500,000.00	
Wisconsin .....	500,000.00	499,973.87	26.13
California .....	500,000.00	365,565.81	134,434.19
Kansas .....	500,000.00	495,552.20	4,447.80
Minnesota .....	500,000.00	483,822.00	16,177.40
Oregon .....	500,000.00	431,576.42	68,423.58
Nevada .....	500,000.00	127,528.33	372,471.67
Nebraska .....	500,000.00	472,382.24	27,617.76
Total .....	7,306,544.67	6,614,439.45	692,105.22

\* The States of Illinois and Alabama received grants under prior acts, which, with the quantities here given, make up the quantity of 500,000 acres.

WILLIS DRUMMOND, *Commissioner*.

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.



No. 9.—Condition of bounty land business under acts of 1847, 1850, 1852, and 1855, showing the issues and locations from the commencement of operations under said acts to June 30, 1872.

Grade of warrants.	Number issued.	Acres embraced thereby.	Number located.	Acres embraced thereby.	Number outstanding.	Acres embraced thereby.
Act of 1847, 160 acres.....	80, 653	12, 904, 480	78, 738	12, 598, 080	1, 915	306, 400
40 acres.....	7, 583	303, 320	7, 034	281, 360	549	21, 960
Total.....	88, 236	13, 207, 800	85, 772	12, 879, 440	2, 464	328, 360
Act of 1850, 160 acres.....	27, 438	4, 390, 080	26, 654	4, 264, 640	784	125, 440
80 acres.....	57, 710	4, 616, 800	55, 885	4, 470, 800	1, 825	146, 000
40 acres.....	103, 971	4, 158, 840	100, 022	4, 000, 880	3, 949	157, 960
Total.....	189, 119	13, 165, 720	182, 561	12, 736, 320	6, 558	429, 400
Act of 1852, 160 acres.....	1, 222	195, 520	1, 190	190, 400	32	5, 120
80 acres.....	1, 698	135, 840	1, 654	132, 320	44	3, 520
40 acres.....	9, 064	362, 560	8, 855	354, 200	209	8, 360
Total.....	11, 984	693, 920	11, 699	676, 920	285	17, 000
Act of 1855, 160 acres.....	113, 116	18, 098, 560	104, 987	16, 797, 920	8, 129	1, 300, 640
120 acres.....	96, 877	11, 625, 240	88, 907	16, 668, 840	7, 970	956, 400
100 acres.....	6	600	5	500	1	100
80 acres.....	49, 374	3, 949, 920	47, 000	3, 760, 000	2, 374	189, 920
60 acres.....	358	21, 480	297	17, 820	61	3, 660
40 acres.....	538	21, 520	448	17, 920	90	3, 600
10 acres.....	5	50	3	30	2	20
Total.....	260, 274	33, 717, 370	241, 647	31, 263, 030	18, 627	2, 454, 340
SUMMARY.						
Act of 1847.....	88, 236	13, 207, 800	85, 772	12, 879, 440	2, 464	328, 360
1850.....	189, 119	13, 165, 720	182, 561	12, 736, 320	6, 558	429, 400
1852.....	11, 984	693, 920	11, 699	676, 920	285	17, 000
1855.....	260, 274	33, 717, 370	241, 647	31, 263, 030	18, 627	2, 454, 340
Total.....	549, 613	60, 784, 810	521, 679	57, 555, 710	27, 934	3, 229, 100

WILLIS DRUMMOND, *Commissioner.*

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.



No. 10.—*Agricultural selections within certain States, and also scrip locations under agricultural and mechanic act of July 2, 1862, and supplements of April 14, 1864, and July 23, 1866.*

Land districts.	Quantity selected in place for the fiscal year ending June 30, 1872.	Quantity located for the fiscal year ending June 30, 1872.	Land districts.	Quantity selected in place for the fiscal year ending June 30, 1872.	Quantity located for the fiscal year ending June 30, 1872.
MISSOURI.	<i>Acres.</i>	<i>Acres.</i>	WISCONSIN.	<i>Acres.</i>	<i>Acres.</i>
Boonville .....		160. 00	Bayfield .....		3, 840. 00
Ironton .....		160. 00	Eau Claire .....		7, 360. 00
Springfield .....					
Total .....		320. 00	Total .....		11, 200. 00
IOWA.			MONTANA.		
Fort Dodge .....		480. 00	Helena .....		27, 178. 75
Sioux City .....		14, 381. 59			
Total .....		14, 861. 59	ARIZONA.		
MINNESOTA.			Prescott .....		160. 00
Taylor's Falls .....		3, 840. 00	UTAH.		
Saint Cloud .....		9, 470. 84	Salt Lake City .....		36, 480. 00
Alexandria .....		13, 560. 91	WASHINGTON TERRITORY.		
Jackson .....		8, 470. 62	Olympia .....		20, 320. 00
New Ulm .....		6, 381. 37	Vancouver .....		2, 720. 00
Litchfield .....		1, 920. 00			
Du Luth .....		17, 731. 39	Total .....		23, 040. 00
Total .....		61, 375. 13	NEW MEXICO.		
NEBRASKA.			Santa Fé .....		1, 280. 00
West Point .....		5, 440. 00	DAKOTA TERRITORY.		
Beatrice .....		4, 954. 44	Springfield .....		7, 680. 00
Lincoln .....		13, 591. 63	Vermillion .....		51, 189. 50
Dakota City .....	77, 954. 94	12, 607. 78	Pembina .....		160. 00
Grand Island .....		12, 312. 87			
Total .....	77, 954. 94	48, 906. 72	Total .....		59, 029. 50
KANSAS.			COLORADO.		
Topeka .....		789. 05	Pueblo .....		37, 657. 12
Humboldt .....		480. 00	Central City .....		9, 575. 93
Concordia .....		47, 321. 99	Denver City .....		20, 949. 90
Augusta .....		2, 960. 00	Fair Play .....		640. 00
Salina .....		19, 669. 26			
Total .....		71, 220. 30	Total .....		68, 822. 95
OREGON.			WYOMING.		
Roseburgh .....		10, 920. 00	Cheyenne .....		2, 400. 00
Le Grande .....		3, 840. 00			
Total .....		14, 760. 00	RECAPITULATION.		
CALIFORNIA.			Missouri .....		320. 00
San Francisco .....	2, 806. 00	72, 000. 00	Iowa .....		14, 861. 59
Sacramento .....	160. 00	44, 299. 11	Minnesota .....		61, 375. 13
Marysville .....		36, 888. 00	Nebraska .....	77, 954. 94	48, 906. 72
Humboldt .....	7, 027. 38	8, 640. 00	Kansas .....		71, 220. 30
Susanville .....		320. 00	Oregon .....		14, 760. 00
Stockton .....	2, 320. 00	55, 731. 32	California .....	17, 316. 77	248, 578. 43
Los Angeles .....	2, 081. 49	2, 080. 00	Nevada .....		4, 000. 00
Visalia .....	1, 001. 25	18, 440. 00	Wisconsin .....		11, 200. 00
Shasta .....		10, 180. 00	Montana .....		27, 178. 75
Aurora .....	1, 920. 65		Arizona .....		160. 00
Total .....	17, 316. 77	248, 578. 43	Utah .....		36, 480. 00
NEVADA.			Washington Territory .....		23, 040. 00
Carson City .....		1, 120. 00	New Mexico .....		1, 280. 00
Aurora .....		2, 880. 00	Dakota Territory .....		59, 029. 50
Total .....		4, 000. 00	Colorado .....		68, 822. 95
			Wyoming .....		2, 400. 00
			Total .....	95, 271. 71	693, 613. 37

WILLIS DRUMMOND, *Commissioner.*



No. 11.—Statement exhibiting land concessions by acts of Congress to States for eanal purposes from the year 1827 to June 30, 1872.

States.	Date of laws.	Statutes.	Page.	Name of canal.	Total num-ber of aeres granted.
Indiana .....	Mar. 2, 1827	4	236	} Wabash and Erie Canal .....	1, 439, 279
Do .....	Feb. 27, 1841	5	414		
Do .....	Mar. 3, 1845	5	731		
Ohio .....	Mar. 2, 1827	4	236	} .....do.....	266, 535
Do .....	June 30, 1834	4	716		
Do .....	May 24, 1828	4	305	Miami and Dayton Canal .....	333, 826
Do, (sec. 5)...	May 24, 1828	4	306	General canal purposes .....	500, 000
Illinois .....	Mar. 2, 1827	4	234	Canal to connect the waters of the Illinois River with those of Lake Michigan.	290, 915
Wisconsin .....	June 18, 1838	5	245	Milwaukee and Rock River Canal .....	125, 431
Do .....	Apr. 10, 1866	14	39	Breakwater, and harbor, and ship canal...	200, 000
Michigan .....	Aug. 26, 1852	10	35	Saint Mary's ship-canal .....	750, 000
Do .....	Mar. 3, 1865	13	519	Portage Lake and Lake Superior ship-canal.	200, 000
Do .....	July 3, 1866	14	81	.....do.....	200, 000
Do .....	July 3, 1866	14	80	Ship-canal to connect the waters of Lake Superior with the lake known as Lac La Belle.	100, 000

RECAPITULATION.

Indiana .....	1, 439, 279
Ohio .....	1, 100, 361
Illinois .....	290, 915
Wisconsin .....	325, 431
Michigan .....	1, 250, 000
Total quantity of acres granted .....	4, 405, 986

WILLIS DRUMMOND, *Commissioner.*

DEPARTMENT OF THE INTERIOR,  
*General Land Office, October 26, 1872.*



No. 12.—Statement exhibiting land concessions by acts of Congress to States and corporations for railroad and military wagon-road purposes from the year 1850 to June 30, 1872.

States.	Date of laws.	Statutes.	Page.	Name of road.	Mile limits.	Estimated quantity embraced in the limits of the grant.	Estimated quantity which the company will receive from the grant.	Number of acres certified or patented for the year ending June 30, 1872.	Number of acres certified or patented up to June 30, 1872.
Illinois.....	Sept. 20, 1850	9	466	Illinois Central.....	6 and 15	} 2, 595, 053. 00	2, 595, 053. 00	.....	2, 595, 053. 00
Do.....	Sept. 20, 1850	9	466	Mobile and Chicago.....	6 and 15				
Mississippi.....	Sept. 20, 1850	9	466	Mobile and Ohio River.....	6 and 15	*1, 004, 640. 00	737, 130. 00	.....	*737, 130. 29
Do.....	Aug. 11, 1856	11	30	Vicksburgh and Meridian, formerly the Southern..	6 and 15	404, 800. 00	200, 000. 00	26, 477, 82	198, 027. 82
Do.....	Aug. 11, 1856	11	30	Gulf and Ship Island.....	6 and 15	†652, 800. 00	200, 000. 00	.....	.....
Alabama.....	Sept. 20, 1850	9	466	Mobile and Ohio River.....	6 and 15	230, 400. 00	419, 528. 00	.....	419, 528. 44
Do.....	May 17, 1856	11	15	Alabama and Florida.....	6 and 15	†419, 520. 00	394, 522. 00	.....	394, 522. 99
Do.....	June 3, 1856	11	17	Selma, Rome and Dalton, formerly Alabama and Tennessee.	6 and 15	481, 920. 00	440, 700. 00	.....	440, 710. 16
Do.....	May 23, 1872	Pam. laws.	159	Act confirming lands heretofore certified to the State for the Alabama and Tennessee Railroad. }					
Do.....	June 3, 1856	11	17	Coosa and Tennessee.....	6 and 15	†132, 480. 00	67, 784. 00	.....	67, 784. 96
Do.....	June 3, 1856	11	17	Mobile and Girard.....	6 and 15	†840, 880. 00	504, 145. 00	.....	504, 145. 86
Do.....	June 3, 1856	11	17	Alabama and Chattanooga, formerly the North-eastern and Southwestern and Wills Valley... }	6 and 15	897, 920. 00	461, 456. 00	.....	461, 456. 09
Do.....	Apr. 10, 1869	16	45	South and North Alabama, formerly the Tennessee and Alabama Central..... }	6 and 15	576, 000. 00	420, 000. 00	308, 183. 87	308, 183. 87
Do.....	June 3, 1856	11	17						
Do.....	Mar. 3, 1871	16	580						
Florida.....	May 17, 1856	11	15	Florida Railroad.....	6 and 15	442, 542. 14	281, 984. 00	.....	281, 984. 17
Do.....	May 17, 1856	11	15	Florida and Alabama.....	6 and 15	†165, 688. 00	165, 688. 00	.....	165, 688. 00
Do.....	May 17, 1856	11	15	Pensacola and Georgia.....	6 and 15	†1, 568, 729. 87	1, 275, 212. 00	.....	1, 275, 212. 93
Do.....	May 17, 1856	11	15	Florida, Atlantic, and Gulf Central.....	6 and 15	†183, 153. 99	37, 583. 00	.....	37, 583. 29
Louisiana.....	June 3, 1856	11	18	Vieksburgh and Shreveport.....	6 and 15	610, 880. 00	353, 211. 70	.....	353, 211. 70
Do.....	June 3, 1856	11	18	New Orleans, Opelousas and Great Western..... }	6 and 15	967, 840. 00	†307, 200. 00	.....	719, 193. 75
Do.....	July 14, 1870	16	277	Act declaring forfeited to the United States all the lands not lawfully disposed of by the State. }					
Arkansas.....	Feb. 9, 1853	10	155	Cairo and Fulton.....	6 and 15	1, 160, 667. 00	1, 115, 408. 00	.....	1, 115, 408. 41
Do.....	July 28, 1866	14	338	Cairo and Fulton.....	Additional 5	1, 040, 000. 00	300, 000. 00	.....	.....
Do.....	May 6, 1870	16	376	Resolution extending time for completion of first twenty miles of road. }					
Do.....	Feb. 9, 1853	10	155	Memphis and Little Rock.....	6 and 15	438, 646. 80	127, 238. 00	.....	127, 238. 51
Do.....	July 28, 1866	14	338	Memphis and Little Rock.....	Additional 5	365, 539. 00	10, 000. 00	.....	.....

\* In the adjustment of this grant the road was treated as an entirety and without reference to the State line; hence Alabama has approved to her more and Mississippi less land than they would appear to be entitled to in proportion to the length of road line in the respective States.  
† No evidence of the construction of any part of these roads, as required by the acts, having been filed in the General Land Office, the grants are presumed to have lapsed, but the lands have not been restored to the mass of public lands, Congress having taken no action to that end.  
‡ Eighty miles constructed road before the grant elapsed.



No. 12.—Statement exhibiting land concessions by acts of Congress to States and corporations, &c.—Continued.

States.	Date of laws.	Statutes.	Page.	Name of road.	Mile limits.	Estimated quantity embraced in the limits of the grant.	Estimated quantity which the company will receive from the grant.	Number of acres certified or patented for the year ending June 30, 1872.	Number of acres certified or patented up to June 30, 1872.
Arkansas	Feb. 9, 1853	10	155	Little Rock and Fort Smith	6 and 15	550, 525. 34	550, 525. 00		550, 520. 18
Do.	July 28, 1866	14	338	Little Rock and Fort Smith	Additional 5	458, 771. 00	450, 000. 00		112, 836. 37
Do.	Apr. 10, 1869	16	46	Act extending time for completion of first twenty miles of road.					
Do.	Mar. 8, 1870	16	76	Act repealing provision in act of April 10, 1869, as to mode of sale of land.					
Do.	July 4, 1866	14	83	Iron Mountain; from the southern boundary line of Missouri to Helena.	10 and 20	864, 000. 00	200, 000. 00		
Missouri.	June 10, 1852	10	8	Hannibal and Saint Joseph	6 and 15	781, 944. 83	599, 400. 00		599, 031. 65
Do.	June 10, 1852	10	8	Pacific and Southwest Branch	6 and 15	1, 161, 235. 07	1, 161, 235. 00	3, 130. 97	1, 161, 204. 51
Do.	Feb. 9, 1853	10	155	Cairo and Fulton	6 and 15	219, 262. 31	63, 540. 00		63, 540. 11
Do.	July 28, 1866	14	338	Cairo and Fulton	Additional 5	182, 718. 00	5, 000. 00		
Do.	July 4, 1866	14	83	Saint Louis and Iron Mountain	10 and 20	640, 000. 00	120, 000. 00		
Iowa.	May 15, 1856	11	9	Burlington and Missouri River	6 and 15	948, 643. 66	292, 085. 53		291, 725. 00
Do.	June 2, 1864	13	96	Burlington and Missouri River	20		95, 816. 46	520. 53	96, 176. 99
Do.	Feb. 10, 1866	14	349	Resolution extending time for completion of road.					
Do.	May 15, 1856	11	9	Chicago, Rock Island and Pacific	6 and 15	1, 261, 181. 60	482, 500. 00		482, 254. 36
Do.	June 2, 1864	13	98	Chicago, Rock Island and Pacific	20		160, 991. 23		159, 893. 10
Do.	May 15, 1856	11	9	Cedar Rapids and Missouri River	6 and 15	1, 298, 739. 00	800, 000. 00		778, 869. 17
Do.	June 2, 1864	13	96	Cedar Rapids and Missouri River	20		356, 988. 00		342, 406. 68
Do.	May 15, 1856	11	9	Iowa Falls and Sioux City, formerly Dubuque and Sioux City.	6 and 15	1, 226, 163. 05	1, 226, 163. 89		1, 226, 163. 89
Do.	June 2, 1864	13	98	Authorizes the Dubuque and Sioux City Railroad to change their line of road.					
Do.	Mar. 2, 1868	15	38	Act extending time for completion of road to January 1, 1872.					
Do.	May 12, 1864	13	72	McGregor and Missouri River	10 and 20	1, 536, 000. 00	400, 000. 00		133, 274. 53
Do.	May 12, 1864	13	72	Sioux City and Saint Paul.	10 and 20	524, 800. 00	250, 000. 00		
Michigan	June 3, 1856	11	21	Port Huron and Milwaukee.	6 and 15	312, 384. 32	6, 429. 00		6, 428. 68
Do.	June 3, 1856	11	21	Detroit and Milwaukee.	6 and 15	355, 420. 19	30, 998. 75		30, 998. 75
Do.	June 3, 1856	11	21	Jackson, Lansing and Saginaw.	6 and 15	1, 052, 469. 19	750, 000. 00	114. 32	742, 940. 56
Do.	July 3, 1866	14	78	Act extending time for completion of road seven years, &c.					
Do.	Mar. 2, 1867	14	425	Act extending time for completion of first twenty miles of road.					
Do.	Mar. 3, 1871	16	586	Act authorizing change of northern terminus from Traverse Bay to Straits of Mackinaw, and for other purposes.					



Do.....	June 3, 1856	11	21	Flint and Pere Marquette .....	6 and 15	586,828.73	513,000.00	953.75	512,506.12
Do.....	Feb. 17, 1865	13	569	Resolution extending time for completion of road.					
Do.....	July 3, 1866	14	78	Act authorizing the company to change its western terminus of road.					
Do.....	Mar. 3, 1871	16	582	Act extending the time for completion of road five years, &c.					
Do.....	June 3, 1856	11	21	Grand Rapids and Indiana .....	6 and 15	629,182.62	629,183.00		629,182.32
Do.....	June 7, 1864	13	119	Grand Rapids and Indiana, from Fort Wayne, Indiana, to Grand Rapids.	6 and 20	531,200.00	212,500.00	8,106.38	212,143.53
Do.....	Mar. 3, 1865	13	530	Act extending time for completion of road eight years.					
Do.....	Mar. 3, 1865	13	521	Bay de Noquet and Marquette.....	200 sections.	128,000.00	128,000.00		52,437.17
Do.....	June 3, 1856	11	21	Marquette and Ontonagon.....	6 and 15	309,315.24	309,000.00		216,919.19
Do.....	Mar. 3, 1865	13	521	Marquette and Ontonagon.....	20	243,200.00	200,000.00		49,086.45
Do.....	May 20, 1868	15	252	Resolution extending time for completion of road with certain restrictions.					
Do.....	Apr. 20, 1871	Pam. laws.	3	Act authorizing the Houghton and Ontonagon Railroad Company to resurvey and locate anew a part of its road.					77,984.05
Do... (Res) ..	July 5, 1862	12	620	Chicago and Northwestern .....	6 and 15	375,680.00	} 460,000.00		110,700.72
Do.....	Mar. 3, 1865	13	521	Chicago and Northwestern .....	20	188,800.00			
Do.....	May 23, 1872	Pam. laws.	160	Act authorizing change of route in Michigan....					
Wisconsin .....	June 3, 1856	11	207	West Wisconsin, formerly the Tomah and Saint Croix.	6 and 15	} 999,983.38	800,000.00	40.00	488,247.07
Do .....	May 5, 1864	13	66	Saint Croix and Lake Superior, and branch to Bayfield.	10 and 20				
Do .....	June 3, 1856	11	20	Saint Croix and Lake Superior, and branch to Bayfield.	6 and 15	*524,714.95	} 724,718.00		524,718.15
Do .....	May 5, 1864	13	66	Saint Croix and Lake Superior, and branch to Bayfield.	6 and 15	*318,737.74			
Do .....	June 3, 1856	11	20	Chicago and Northwestern, formerly Chicago, Saint Paul and Fond du Lac.	10 and 20	*350,000.00	} 468,740.00		318,740.80
Do .....	Apr. 25, 1862	12	618	Resolution authorizing change of route in Wisconsin and selection of lands.	10 and 20	*215,000.00			
Do .....	Mar. 3, 1869	15	307	Wisconsin Central, formerly Portage, Winnebago and Superior.	6 and 15	*600,000.00	400,000.00		311,307.72
Do .....	May 5, 1864	13	66	Resolution explanatory of the act of May 5, 1864, and authorizing certain changes of route in accordance with act of the State legislature.	10 and 20	750,000.00	750,000.00		
Do .....	June 21, 1866	14	360	Saint Paul and Pacific.....					
Minnesota .....	Mar. 3, 1857	11	195	Saint Paul and Pacific.....	6 and 15	} 1,248,638.95	1,248,638.95	521,402.21	1,108,473.40
Do .....	Mar. 3, 1865	13	526	Branch Saint Paul and Pacific.....	10 and 20				
Do .....	Mar. 3, 1857	11	195	Branch Saint Paul and Pacific.....	6 and 15	} 1,475,000.00	940,000.00	136.08	539,208.41
Do .....	Mar. 3, 1865	13	526	Resolution authorizing the State to change the branch line under certain considerations.	10 and 20				
Do .....	July 12, 1862	12	624	Saint Vincent extension of Saint Paul and Pacific Railroad. South terminus changed from Crow Wing to Saint Cloud.	10 and 20	2,000,000.00	2,000,000.00		
Do .....	Mar. 3, 1871	16	588	Minnesota Central.....	6 and 15	353,403.00	178,000.00	320.00	177,922.79
Do .....	Mar. 3, 1857	11	195	Minnesota Central.....	10 and 20	290,000.00	200,000.00		
Do .....	Mar. 3, 1865	13	526	Winona and Saint Peter.....	6 and 15	} 1,410,000.00	710,000.00	3,036.88	559,801.27
Do .....	Mar. 3, 1857	11	195	Winona and Saint Peter.....	10 and 20				

\* No evidence of the construction of any part of the Saint Croix and Lake Superior Railroad and branch in Wisconsin, as required by the act, having been filed in the General Land Office, the grant is presumed to have lapsed, but the lands have not, however, been restored to the mass of public lands, Congress having taken no action to that end.



No. 12.—Statement exhibiting land concessions by acts of Congress to States and corporations, &c.—Continued.

States.	Date of laws.	Statutes.	Page.	Name of road,	Mile limits.	Estimated quantity embraced in the limits of the grant.	Estimated quantity which the company will receive from the grant.	Number of acres certified or patented for the year ending June 30, 1872.	Number of acres certified or patented up to June 30, 1872.
Minnesota .....	Mar. 3, 1857	11	195	Saint Paul and Sioux City.....	6 and 15	} 1, 010, 000. 00	850, 000. 00	21, 850. 73	834, 194. 60
Do .....	May 12, 1864	13	74	Saint Paul and Sioux City.....	10 and 20				
Do .....	July 13, 1866	14	97	Act extending time for completion of road seven years.					
Do .....	May 5, 1864	13	64	Lake Superior and Mississippi .....	10 and 20	841, 454. 00	430, 854. 00	25, 900. 08	393, 324. 27
Do .....	July 13, 1866	14	93	Act authorizing the Lake Superior and Mississippi Railroad Company to make up deficiency of land within thirty miles of west line of road.	30				
Do .....	July 4, 1866	14	87	Southern Minnesota .....	10 and 20	735, 000. 00	450, 000. 00	68, 639. 78	194, 120. 72
Do .....	July 4, 1866	14	87	Hastings and Dakota.....	10 and 20	550, 000. 00	500, 000. 00		
Kansas .....	Mar. 3, 1863	12	772	Leavenworth, Lawrence and Galveston.....	10 and 20	800, 000. 00	480, 000. 00	168, 189. 04	168, 189. 04
Do .....	July 1, 1864	13	339	Act changing route of branch line.....					
Do .....	Apr. 19, 1871	Pam. laws.	5	Act authorizing the company to relocate a portion of its road.					
Do .....	Mar. 3, 1863	12	772	Atchison, Topeka and Santa Fe.....	10 and 20	3, 000, 000. 00	2, 500, 000. 00		
Do .....	July 23, 1866	14	210	Saint Joseph and Denver City.....	10 and 20	1, 700, 000. 00	500, 000. 00		
Do .....	July 25, 1866	14	236	Missouri River, Fort Scott and Gulf.....	10 and 20	2, 350, 000. 00	17, 000. 00		
Do .....	Mar. 3, 1863	12	772	Missouri, Kansas and Texas.....	10 and 20	1, 520, 000. 00	800, 000. 00	508, 342. 17	508, 342. 17
Do .....	July 1, 1864	13	339	Act extending grant from Emporia to a point near Fort Riley.					
Do .....	July 26, 1866	14	289	Act making grant from Fort Riley to the southern boundary of the State.					
Corporations .....	July 1, 1862	12	489	Union Pacific, from Omaha, Nebraska, to a point near Ogden, in Utah Territory.	10	} 12, 000, 000. 00	12, 000, 000. 00	.....	639, 024. 00
Do .....	July 2, 1864	13	356	Union Pacific.....	20				
Do .....	July 3, 1866	14	79	Act authorizing location of Union Pacific Railroad from Omaha westward.					
	July 26, 1866	14	367	Resolution granting right of way through military reserves, &c.					
	Apr. 10, 1869	16	56	Resolution for the protection of the interests of the United States in the Union Pacific and Central Pacific Railroads, and providing that the common terminus of the roads shall be at or near Ogden, Utah Territory, &c.					
	May 6, 1870	16	121	Act fixing the point of junction of the Union Pacific and Central Pacific railroads, &c.					



Do .....	July 1, 1862	12	489	Central branch Union Pacific.....	10	}	245,166.00	245,166.00	183,893.25	183,893.25
Do .....	July 2, 1864	13	356	Central branch Union Pacific.....	20					
Do .....	July 1, 1862	12	489	Kansas Pacific, formerly Union Pacific, Eastern Division.	10					
Do .....	July 2, 1864	13	356	Kansas Pacific .....	20	}	6,000,000.00	6,000,000.00		
	July 3, 1866	14	79	Act requiring the company to designate general route before December 1, 1866.						
	May 7, 1866	14	355	Resolution extending time for completion of road.						
	Mar. 3, 1869	15	324	Act extending the Union Pacific Railway, Eastern Division, line of road to Denver City, and authorizing a transfer of lands by said company to the Denver Pacific Railroad Company between Denver and Cheyenne.		}				
	Mar. 3, 1869	15	348	Resolution authorizing the Union Pacific Railway Company, East Division, to change its name to Kansas Pacific.						
Do .....	Mar. 3, 1869	15	324	Denver Pacific .....	20					
Do .....	July 1, 1862	12	489	Central Pacific .....	10	}	8,000,000.00	8,000,000.00	33,379.93	304,385.78
Do .....	July 2, 1864	13	356	Central Pacific.....	20					
	July 3, 1866	14	79	Act authorizing location of road eastward.....						
	Mar. 3, 1865	13	504	Act ratifying the assignment made by the Central Pacific Railroad Company to the Western Railroad Company of that portion from San José to the city of Sacramento.		}				
	May 6, 1870	16	121	Act fixing the point of junction of the Central Pacific and Union Pacific Railroads, &c.						
Do .....	July 1, 1862	12	489	Western Pacific.....	10					
Do .....	July 2, 1864	13	356	Western Pacific.....	20	}	1,100,000.00	1,100,000.00	19,741.19	300,066.09
	May 21, 1866	14	356	Resolution extending time for completion of first section of twenty miles of road upon certain conditions.						
Do .....	July 2, 1864	13	364	Burlington and Missouri River, Nebraska.....	20 sections.					
	May 6, 1870	16	118	Act authorizing change of route and connection with the Union Pacific Railroad at or near Fort Kearney.		}	2,444,800.00	2,444,800.00	1,420,178.79	1,420,178.79
Do .....	July 2, 1864	13	363	Sioux City and Pacific.....	10					
Do .....	July 2, 1864	13	365	Northern Pacific.....	States, 20, 30, & 40; Territories, 40, 50, and 60.					
	May 7, 1866	14	355	Resolution extending time for commencing and completing road.		}	60,000.00	60,000.00		
	July 1, 1868	15	255	Resolution extending time for commencing and completing road.						
	Mar. 1, 1869	15	346	Resolution authorizing issue of bonds, &c.....						
	Apr. 10, 1869	16	57	Resolution authorizing the company to extend its branch line from Portland to Puget Sound, &c.		}	47,000,000.00	47,000,000.00		
	May 31, 1870	16	378	Resolution authorizing the issue of mortgage bonds, reversing locations of main and branch lines in Washington Territory, extending indemnity limits, &c.						
Do .....	July 13, 1866	14	94	Placerville and Sacramento Valley .....	10 and 20					

\* No evidence of the construction of any part of the Placerville and Sacramento Valley Railroad, as required by the act, having been filed in the General Land Office, the grant is presumed to have lapsed; but the lands have not, however, been restored to the mass of public lands, Congress having taken no action to that end.



No. 12.—Statement exhibiting land concessions by acts of Congress to corporations, &c.—Continued.

States.	Date of laws.	Statutes.	Page.	Name of road.	Mile limits.	Estimated quantity embraced in the limits of the grant.	Estimated quantity which the company will receive from the grant.	Number of acres certified or patented for the year ending June 30, 1872.	Number of acres certified or patented up to June 30, 1872.
Corporations.....	July 25, 1866 June 25, 1868 Apr. 10, 1869	14 15 16	239 80 47	Oregon Branch of the Central Pacific..... Act extending time for completion of road ..... Act amendatory of the original act and providing for the sale of the lands to actual settlers only, at a fixed price and limited quantity.	20 and 30	3, 000, 000. 00	3, 000, 000. 00	159, 956. 47	159, 956. 47
Do.....	July 25, 1866 June 25, 1868 Apr. 10, 1869	14 15 16	239 80 47	Oregon and California ..... Act extending time for completion of road ..... Act amendatory of the original act and providing for the sale of the lands to actual settlers only, at a fixed price and limited quantity.	20 and 30	3, 500, 000. 00	3, 500, 000. 00	69, 061. 63	221, 896. 00
Do.....	July 27, 1866 Apr. 20, 1871	14 Pam. laws	292 19	Atlantic and Pacific ..... "An act to enable the company to mortgage its road."	States, 20, & 30; Territories, 40, and 50.	42, 000, 000. 00	40, 000, 000. 00	3, 171. 71	496, 350 17
Do.....	July 27, 1866	14	292	Southern Pacific of California .....	20 and 30	6, 000, 000. 00	3, 750, 000. 00		
Do.....	Mar. 3, 1871	16	573	Southern Pacific.....	20 and 30	3, 520, 000. 00	3, 000, 000. 00		
Do.....	Mar. 2, 1867	14	548	Stockton and Copperopolis .....	10 and 20	320, 000. 00	100, 000. 00		
Do.....	May 4, 1870	16	94	Oregon Central.....	20 and 25	1, 200, 000. 00	300, 000. 00		
Do.....	Mar. 3, 1871	16	573	Texas Pacific .....	California, 20 & 30; Territories, 40, 50.	18, 000, 000. 00	17, 000, 000. 00		
Do.....	Mar. 3, 1871	16	579	New Orleans, Baton Rouge and Vicksburgh.....	20 and 30	4, 000, 000. 00	1, 600, 000. 00		
Right of way in States and Territories: Utah Territory ..	Dec. 15, 1870	16	395	Act granting right of way to the Utah Central Company, for 200 feet in width on each side of road, &c.					
Oregon and Utah Territory.	Apr. 12, 1872	Pam. laws.	52	Act granting right of way to the Portland, Dallas and Salt Lake Company, for 100 feet on each side of central line of road and branch.					
Dakota Territory.	May 27, 1872	....do .....	163	Act declaring the Dakota Southern Company a legal corporation, and granting the right of way for 100 feet on each side of road.					
Do.....	June 1, 1872	....do .....	202	Act granting right of way to the Dakota Grand Trunk Company, for 100 feet in width on each side of central line and branches.					



Utah, Idaho, and Montana Territories.	June 1, 1872	....do	212	Act granting right of way to the Utah, Idaho and Montana Company, for 100 feet in width on each side of center line of road.					
Iowa .....	June 4, 1872	....do	220	Act granting right of way to the Davenport and Saint Paul Company.					
Florida .....	June 4, 1872	....do	224	Act granting right of way to the Great Southern Railway Company, for 100 feet in width on each side of road and branch.					
Do .....	June 7, 1872	....do	280	Act granting right of way to the Jacksonville and Saint Augustine Company, for 100 feet in width on each side of road and any of its branches.					
Colorado Territory.	June 8, 1872	....do	339	Act granting the right of way to the Denver and Rio Grande Railway Company, for 100 feet in width on each side of road, &c.					
Alabama .....	June 8, 1872	....do	340	Act granting right of way to the Pensacola and Louisville Company, for 100 feet in width on each side of road, &c.					
New Mexico .....	June 8, 1872	....do	343	Act granting right of way to the New Mexico and Gulf Railway Company, for 100 feet in width on each side of road, &c.					
WAGON-ROADS.									
Wisconsin .....	Mar. 3, 1863	12	797	From Fort Wilkins, Copper Harbor, Michigan, to Fort Howard, Green Bay, Wisconsin.	3 and 15	✓302, 930. 96	302, 930. 96	37, 326. 31	302, 930. 96
Do .....	June 8, 1868	15	67	Time extended for completion road to Mar. 1, 1870.					
Do .....	May 6, 1870	16	121	Act extending time for completion of road to January 1, 1872.					
Michigan .....	Mar. 3, 1863	12	797	From Fort Wilkins, Copper Harbor, Michigan, to Fort Howard, Green Bay, Wisconsin.	3 and 15	✓221, 013. 27	221, 013. 00	95, 957. 91	143, 816. 76
Do .....	June 8, 1868	15	67	Act extending time for completion of road to March 1, 1870.					
Do .....	May 6, 1870	16	121	Act extending time for completion of road to January 1, 1872.					
Do .....	Apr. 24, 1872	Pam. laws	56	Act extending time for completion of road to January 1, 1874.					
Do .....	June 20, 1864, providing for two roads.	13	140	No maps filed; limitations of grant expired June 20, 1869.					
Oregon .....	July 2, 1864	13	355	Oregon Central Military Road .....	3	} ✓720, 000. 00	720, 000. 00	123, 146. 05	333, 409. 01
Do .....	Dec. 26, 1866	14	374	Act making provision for indemnity limits of six miles.	6				
Do .....	Mar. 3, 1869	15	338	Act extending time for completion of road to July 2, 1872.					
Do .....	July 4, 1866	14	86	Corvallis and Acquina Bay Military Road .....	3	✓76, 800. 00	76, 800. 00	20, 878. 88	57, 506. 89
Do .....	July 5, 1866	14	89	Willamette Valley and Cascade Mountain Military Road.	3 alternate sections selected with- in 6 m. l.	✓460, 000. 00	460, 000. 00	61, 127. 83	107, 942. 28
Do .....	July 15, 1871	16	363	An act amendatory to original act .....					
Do .....	Feb. 25, 1867	14	409	Dallas Military Road .....	3 and 10	✓556, 800. 00	556, 800. 00	126, 910. 23	126, 910. 23
Do .....	Mar. 3, 1869	15	340	Military road from Coos Bay to Roseburgh. ....	3 and 6	✓75, 000. 00	50, 000. 00		



## REPORT OF THE COMMISSIONER OF

## RECAPITULATION.

States.	Estimated quantity embraced in the limits of the grants, (acres.)	Estimated quantity which the company will receive from the grants, (acres.)	Number of acres certified or patented under the grants, (acres.)
Illinois.....	2, 595, 053. 00	2, 595, 053. 00	2, 595, 053. 00
Mississippi.....	2, 062, 240. 00	1, 137, 130. 00	935, 158. 11
Alabama.....	3, 579, 120. 00	2, 708, 135. 00	2, 596, 332. 37
Florida.....	2, 360, 114. 00	1, 760, 467. 00	1, 760, 468. 39
Louisiana.....	1, 578, 720. 00	660, 411. 70	1, 072, 405. 45
Arkansas.....	4, 878, 149. 14	2, 753, 171. 00	1, 906, 003. 47
Missouri.....	2, 985, 160. 21	1, 949, 175. 00	1, 823, 776. 27
Iowa.....	6, 795, 527. 31	4, 064, 545. 11	3, 510, 763. 72
Michigan.....	4, 712, 480. 29	3, 239, 110. 75	2, 641, 327. 54
Wisconsin.....	3, 758, 436. 07	3, 143, 458. 00	1, 643, 013. 74
Minnesota.....	9, 913, 495. 95	7, 507, 492. 95	3, 807, 051. 46
Kansas.....	9, 370, 000. 00	4, 297, 000. 00	676, 531. 21
Corporations: Pacific Railroads.....	54, 588, 495. 97 159, 689, 966. 00	35, 815, 149. 51 150, 299, 966. 00	24, 899, 244. 95 3, 725, 750. 85
Wagon-roads: Wisconsin.....	214, 278, 461. 97	186, 115, 115. 51	28, 624, 995. 80
Michigan.....	302, 930. 96	302, 930. 96	302, 930. 96
Oregon.....	221, 013. 27 1, 168, 600. 00	221, 013. 00 1, 143, 600. 00	143, 816. 76 625, 768. 41
Deduct for lands reverted and lapsed, and for lands declared forfeited by Congress.....	215, 971, 006. 20 6, 539, 544. 55	187, 782, 659. 47 4, 350, 385. 75	29, 697, 511. 93 4, 007, 590. 73
Total.....	209, 431, 461. 65	183, 432, 273. 72	25, 689, 921. 20

DEPARTMENT OF THE INTERIOR,  
General Land Office, October 26, 1872.

WILLIS DRUMMOND, *Commissioner.*



No. 13.—*Estimates of appropriations required for the service of the fiscal year ending June 30, 1874, by the General Land Office.*

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
SALARIES.			
Commissioner General Land Office, act of July 4, 1836, (Stat. L., vol. 5, p. 111, sec. 10.)	\$3,000 00		
Chief clerk, act of March 3, 1853, (Stat. L., vol. 111, p. 211, sec. 3.)	2,000 00		
Recorder, act of July 4, 1836, (Stat. L., vol. 5, p. 111, sec. 4;) act of March 3, 1837, (Stat., vol. 5, p. 164, sec. 1.)	2,000 00		
Three principal clerks, of public lands, of private land claims, and surveys, at \$1,800 each, act of July 4, 1836, (Stat. L., vol. 5, p. 109, sec. 2;) Stat. L., vol. 5, pp. 109, 111, secs. 2, 3.)	5,400 00		
Three clerks of class 4, act of March 3, 1853, (Stat. L., vol. 10, p. 211, sec. 3.)	5,400 00		
Twenty-three clerks of class 3, act of March 3, 1853, (Stat. L., vol. 10, p. 211, sec. 3;) act of April 22, 1854, (Stat. L., vol. 10, p. 276, sec. 1.)	36,800 00		
Forty clerks of class 2, (same acts).....	56,000 00		
Forty clerks of class 1, (same acts).....	48,000 00		
Draughtsman, at \$1,600, and assistant draughtsman, at \$1,400, act of July 4, 1836, (Stat. L., vol. 5, p. 112, sec. 10;) act of April 22, 1854, (Stat. L., vol. 10, p. 276, sec. 1.)	3,000 00		
Two messengers, at \$840 each, and three assistant messengers, at \$720 each, act of July 4, 1836, (Stat. L., vol. 5, p. 112, sec. 10;) act of August 18, 1856, (Stat. L., vol. 11, p. 145, sec. 1;) act of March 3, 1869, (Stat. L., vol. 15, p. 287, sec. 1;) act of July 12, 1870, (Stat. L., vol. 16, p. 243, sec. 1.)	3,840 00		
Two packers, at \$720 each, act of July 4, 1836, (Stat. L., vol. 5, p. 112, sec. 10;) act of March 3, 1869, (Stat. L., vol. 15, p. 287, sec. 1.)	1,440 00		
Seven laborers, at \$720 each, act of August 18, 1856, (Stat. L., vol. 11, p. 145, sec. 1;) act March 3, 1869, (Stat. L., vol. 15, p. 257, sec. 1;) act of July 12, 1870, (Stat. L., vol. 16, p. 250, sec. 3.)	5,040 00	\$171,920 00	\$171,920 00
<i>Additional clerks on account of military bounty lands.</i>			
One principal clerk as director, act of March 3, 1855, (Stat. L., vol. 10, p. 664, sec. 1.)	2,000 00		
One clerk of class 3, (same act) .....	1,600 00		
Four clerks of class 2, (same act).....	5,600 00		
Thirty-five clerks of class 1, act of March 3, 1855, (Stat. L., vol. 10, p. 664, sec. 1;) act of July 12, 1870, (Stat. L., vol. 16, p. 243, sec. 1.)	42,000 00		
Two laborers, at \$720 each, act of August 18, 1856, (vol. 11, p. 145, sec. 1;) act of March 3, 1869, (Stat. L., vol. 15, p. 287, sec. 1;) act of July 12, 1870, (Stat. L., vol. 16, p. 250, sec. 3.)	1,440 00	52,640 00	52,640 00
Compensation of President's secretary to sign patents for public lands, act of July 4, 1836, (Stat. L., vol. 5, p. 111, sec. 6.)	1,500 00	1,500 00	1,500 00
CONTINGENT EXPENSES.			
Stationery, diagrams, parchment paper for land patents, furniture, and repairs of the same; miscellaneous items, including two of the city newspapers, to be filed, bound, and preserved for the use of the office; advertising and telegraphing. (See note.)	30,000 00	.....	20,000 00
NOTE.—The sum of \$20,000 appropriated for these purposes for the year ending June 30, 1873, is insufficient to meet the demands upon this fund. The sum of \$30,000 is therefore submitted as the lowest amount which will be required to meet the incidental expenses of this office.			

WILLIS DRUMMOND, *Commissioner.*

DEPARTMENT OF THE INTERIOR,  
*General Land Office, October 26, 1872.*



No. 14.—*Estimate of appropriations required for the service of the fiscal year ending June 30, 1874, by the General Land Office.*

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
ESTIMATE FOR PRINTING, BINDING, ETC. (Act of May 8, 1872, sec. 2.)			
Land office reports, with accompanying map, circulars, patents, tract books, indices, records, field notes, abstracts, and other miscellaneous printing and binding required for the use of the office.	\$30,000 00	\$30,000 00	
COLLECTING REVENUE FROM SALES OF PUBLIC LAND.			
Salaries and commissions of registers and receivers. (See detailed herewith. See note No. 1.)	498,700 00	498,700 00	\$451,200 00
Incidental expenses of the several land offices.....	55,040 00	55,040 00	51,175 00
Expense of depositing public moneys.....	13,000 00	13,000 00	13,000 00
NOTE No. 1.—This estimate is for a larger amount than appropriated for the fiscal year ending June 30, 1873, owing to the opening of additional land offices.			

DEPARTMENT OF THE INTERIOR,  
*General Land Office, October 26, 1873.*

WILLIS DRUMMOND, *Commissioner.*

*Detailed estimate of amount required for salaries and commissions of registers and receivers and incidental expenses of the several land offices during the fiscal year ending June 30, 1874.*

State.	Land offices.	Salaries and commissions.	Incidental expenses.	Total.
Alabama.....	Huntsville.....	\$6,000	\$600	\$19,100
	Montgomery.....	6,000	1,000	
	Mobile.....	5,000	500	
Arizona.....	Prescott.....	3,000	400	3,400
Arkansas.....	Dardanelle.....	6,000	600	
	Harrison.....	6,000	600	
	Little Rock.....	6,000	900	
California.....	Camden.....	6,000	740	26,840
	San Francisco.....	6,000	900	
	Sacramento.....	6,000	600	
	Marysville.....	6,000	900	
	Humboldt.....	6,000	900	
	Susanville.....	6,000	900	
	Stockton.....	6,000	900	
	Los Angeles.....	6,000	600	
	Visalia.....	6,000	900	
	Shasta.....	6,000	900	
	Chilliothe.....	2,000	550	2,550
Ohio.....	Indianapolis.....	1,500	300	1,800
Missouri.....	Boonville.....	6,000	750	
	Ironton.....	6,000	600	
	Springfield.....	6,000	600	
Mississippi.....	Jackson.....	6,000	600	6,600
Louisiana.....	Natchitoches.....	4,000	600	
	Monroe.....	5,000	600	
	New Orleans.....	6,000	600	
Michigan.....	Detroit.....	6,000	800	16,800
	East Saginaw.....	6,000	600	
	Ionia.....	5,000	600	
	Marquette.....	6,000	600	
	Traverse City.....	6,000	600	
Florida.....	Tallahassee.....	6,000	600	31,800
	Gainesville.....	6,000	600	
Iowa.....	Fort Des Moines.....	5,000	500	13,200
	Council Bluffs.....	5,000	500	
	Fort Dodge.....	6,000	600	
	Sioux City.....	6,000	600	



*Detailed estimate of amount required for salaries and commissions, &c.—Continued.*

State.	Land offices.	Salaries and commissions.	Incidental expenses.	Total.
Nevada.....	Carson City.....	\$5,000	\$500	
	Austin.....	5,000	500	
	Belmont.....	3,000	300	
	Aurora.....	3,000	300	
	Elko.....	6,000	600	\$24,200
Washington.....	Olympia.....	6,000	600	
	Vancouver.....	6,000	600	
	Walla Walla.....	6,000	600	19,800
Oregon.....	Oregon City.....	6,000	600	
	Roseburgh.....	6,000	600	
	Le Grand.....	6,000	600	
	Linkville.....	6,000	600	26,400
Colorado.....	Pueblo.....	6,000	600	
	Central City.....	4,000	400	
	Denver City.....	6,000	600	
Illinois.....	Fair Play.....	5,000	500	23,100
	Springfield.....	1,200	600	1,800
Idaho.....	Boise City.....	3,000	300	
	Lewiston.....	2,000	200	5,500
Wyoming.....	Cheyenne.....	4,000	400	4,400
Wisconsin.....	Menasha.....	6,000	600	
	Falls St. Croix.....	6,000	600	
	Wausau.....	6,000	600	
	La Crosse.....	6,000	600	
	Bayfield.....	6,000	600	
	Eau Claire.....	6,000	600	39,600
	Taylor's Falls.....	6,000	600	
	Saint Cloud.....	6,000	600	
	Du Luth.....	6,000	600	
	Alexandria.....	6,000	600	
Minnesota.....	Jackson.....	6,000	600	
	New Ulm.....	6,000	600	
	Litchfield.....	6,000	600	
	Redwood Falls.....	6,000	600	
	Oak Lake.....	6,000	600	59,400
	Springfield.....	4,000	400	
	Vermillion.....	6,000	600	
	Pembina.....	6,000	600	
	Yankton.....	6,000	600	24,200
	Topeka.....	6,000	900	
Kansas.....	Salina.....	6,000	600	
	Independence.....	6,000	600	
	Wichita.....	6,000	600	
	Concordia.....	6,000	600	
	Cawker City.....	6,000	600	39,900
	West Point.....	4,000	400	
	Beatrice.....	6,000	600	
	Lincoln.....	6,000	600	
	Dakota City.....	4,000	400	
	Grand Island.....	6,000	600	
Nebraska.....	North Platte.....	6,000	600	
	Lowell.....	6,000	600	41,800
	Helena.....	5,000	500	5,500
Montana.....	Salt Lake City.....	6,000	600	6,600
Utah.....	Santa Fé.....	4,000	400	4,400
New Mexico.....				
Total.....		498,700	55,040	553,740

WILLIS DRUMMOND,  
Commissioner.

DEPARTMENT OF THE INTERIOR.  
General Land Office, October 26, 1872.



No. 15.—*Estimates of appropriations required for the service of the fiscal year ending June 30, 1874, by the General Land Office.*

Detailed objects of expenditure, and explanations.	Estimates by surveyors general.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
PUBLIC LANDS.				
<i>Office of surveyor general of Louisiana.*</i>				
Salaries :				
Surveyor general, per act March 3, 1831, (4 Stat., p. 493, sec. 5.)	\$2, 000	\$2, 000		
Clerks in his office, per act May 9, 1836, (5 Stat., p. 26, sec. 1.)	8, 100	8, 100		
Contingent expenses :			\$10, 100	\$6, 200
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act March 3, 1831, (4 Stat., p. 493, sec. 4.)	2, 500	2, 500	2, 500	2, 500
<i>Office of surveyor general of Florida.†</i>				
Salaries :				
Surveyor general, per act March 3, 1823, (3 Stat., p. 755, sec. 7.)	2, 000	2, 000		
Clerks in his office, per act May 9, 1836, (5 Stat., p. 26, sec. 1.)	4, 200	4, 200		
Contingent expenses :			6, 200	6, 200
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act May 9, 1836, (5 Stat., p. 26, sec. 1.)	1, 500	1, 500	1, 500	1, 500
<i>Office of surveyor general of Minnesota.‡</i>				
Salaries :				
Surveyor general, per acts May 18, 1796, and March 3, 1857, (1 Stat., p. 468, sec. 10 ; 11 Stat., p. 212, sec. 1.)	2, 000	2, 000		
Clerks in his office, per acts May 9, 1836, and March 3, 1857, (5 Stat., p. 26, sec. 1 ; 11 Stat., p. 212, sec. 1.)	8, 400	8, 400		
Contingent expenses :			10, 400	12, 000
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act March 9, 1836, (5 Stat., p. 26, sec. 1.)	2, 200	2, 200	2, 200	2, 200
<i>Office of surveyor general of Dakota.§</i>				
Salaries :				
Surveyor general, per act March 2, 1861, (12 Stat., p. 244, sec. 17.)	2, 000	2, 000		
Clerks in his office, per act March 2, 1861, (12 Stat., p. 244, sec. 17.)	6, 300	6, 300		
Contingent expenses :			8, 300	14, 600
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act March 2, 1861, (12 Stat., p. 244, sec. 17.)	2, 000	2, 000	2, 000	2, 000
<i>Office of surveyor general of Kansas.  </i>				
Salaries :				
Surveyor general, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	2, 000	2, 000		
Clerks in his office, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	7, 500	7, 500		
Contingent expenses :			9, 500	9, 500
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	2, 000	2, 000	2, 000	2, 000
<i>Office of surveyor general of Colorado.¶</i>				
Salaries :				
Surveyor general, per act February 23, 1861, (12 Stat., p. 176, sec. 17.)	3, 000	3, 000		
Clerks in his office, per act February 28, 1861, (12 Stat., p. 176, sec. 17.)	6, 300	6, 300		
			9, 300	9, 300



No. 15.—*Estimates of appropriations required by the General Land Office, &c.*—Continued.

Detailed objects of expenditure, and explanations.	Estimates by surveyors general.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act February 28, 1861, (12 Stat., p. 176, sec. 17.)	\$2, 000	-----	\$2, 000	\$2, 000
<i>Office of surveyor general of New Mexico. *</i>				
<b>Salaries :</b>				
Surveyor general, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	3, 000	\$3, 000		
Clerks in his office, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	20, 000	6, 300	9, 300	9, 300
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 22, 1854, (10 Stat., p. 309, sec. 10.)	2, 750	-----	2, 000	2, 000
<i>Office of surveyor general of California. †</i>				
<b>Salaries :</b>				
Surveyor general, per act May 30, 1862, (12 Stat., p. 410, sec. 9.)	-----	3, 000		
Clerks in his office, per act March 3, 1853, (10 Stat., p. 245, sec. 2.)	-----	25, 000	28, 000	29, 000
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act March 3, 1853, (10 Stat., p. 245, sec. 2.)	-----	-----	7, 500	7, 500
<i>Office of surveyor general of Idaho. ††</i>				
<b>Salaries :</b>				
Surveyor general, per act June 29, 1866, (14 Stat., p. 77, sec. 1.)	3, 000	3, 000		
Clerks in his office, per act June 29, 1866, (14 Stat., p. 77, sec. 1.)	4, 000	4, 000	7, 000	11, 000
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act June 29, 1866, (14 Stat., p. 77, sec. 1.)	3, 000	3, 000	3, 000	2, 500
<i>Office of surveyor general of Nevada. §§</i>				
<b>Salaries :</b>				
Surveyor general, per act July 4, 1866, (14 Stat., p. 86, sec. 4.)	3, 000	3, 000		
Clerks in his office, per act July 4, 1866, (14 Stat., p. 86, sec. 4.)	6, 300	6, 300	9, 300	9, 300
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 14, 1866, (14 Stat., p. 86, sec. 4.)	4, 200	3, 700	3, 700	3, 700
<i>Office of surveyor general of Oregon.    </i>				
<b>Salaries :</b>				
Surveyor general, per act May 30, 1862, (12 Stat., p. 410, sec. 9.)	2, 500	2, 500		
Clerks in his office, per act September 27, 1850, (9 Stat., p. 496, sec. 2.)	6, 600	5, 400	7, 900	7, 900
<b>Contingent expenses :</b>				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act September 27, 1850, (9 Stat., p. 496, sec. 2.)	2, 000	-----	2, 000	2, 000
<i>Office of surveyor general of Washington. ¶¶</i>				
<b>Salaries :</b>				
Surveyor general, per acts July 17, 1854, (10 Stat., p. 306, sec. 7,) and May 30, 1862, (12 Stat., p. 410, sec. 9.)	2, 500	2, 500		
Clerks in his office, per act March 3, 1855, (10 Stat., p. 674, sec. 26.)	7, 200	7, 000	9, 500	9, 500



No. 15.—*Estimates of appropriations required by the General Land Office, &c.*—Continued.

Detailed objects of expenditure, and explanations.	Estimates by surveyors general.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 17, 1854, (10 Stat., p. 306, sec. 7.)	\$2, 000	\$2, 000	\$2, 000	\$2, 000
<i>Office of surveyor general of Nebraska and Iowa.***</i>				
Salaries:				
Surveyor general, per acts July 17, 1854, (10 Stat., p. 306, sec. 7,) and May 30, 1862, (12 Stat., p. 410, sec. 9.)	2, 000	2, 000		
Clerks in his office, per act May 30, 1862, (12 Stat., p. 410, sec. 9.)	8, 700	6, 300	8, 300	14, 600
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per acts June 12, 1838, (5 Stat., p. 243,) and March 2, 1867, (14 Stat., p. 448, sec. 1.)	3, 000	2, 500	2, 500	2, 000
<i>Office of surveyor general of Montana.†††</i>				
Salaries:				
Surveyor general, per act March 2, 1867, (14 Stat., p. 542, sec. 1.)	3, 000	3, 000		
Clerks in his office, per act March 2, 1867, (14 Stat., p. 542, sec. 1.)	7, 800	6, 000	9, 000	9, 000
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act March 2, 1867, (14 Stat., p. 542, sec. 1.)	3, 000	.....	2, 500	2, 000
<i>Office of surveyor general of Utah.+++</i>				
Salaries:				
Surveyor general, per act July 16, 1868, (15 Stat., p. 91, sec. 1.)	3, 000	3, 000		
Clerks in his office, per act July 16, 1868, (15 Stat., p. 91, sec. 1.)	4, 700	4, 700	7, 700	7, 700
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 16, 1868, (15 Stat., p. 91, sec. 1.)	2, 000	2, 000	2, 000	1, 800
<i>Office of surveyor general of Wyoming. §§§</i>				
Salaries:				
Surveyor general, per act Feb. 5, 1870, (16 Stat., p. 65, sec. 2.)	3, 000	3, 000		
Clerks in his office, per act Feb. 5, 1870, (16 Stat., p. 65, sec. 2.)	6, 000	6, 700	9, 700	9, 700
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act Feb. 5, 1870, (16 Stat., p. 65, sec. 2.)	2, 500	.....	2, 500	2, 500
<i>Office of surveyor general of Arizona.     </i>				
Salaries:				
Surveyor general, per act July 11, 1870, (16 Stat., p. 230, sec. 1.)	3, 000	3, 000		
Clerks in his office, per act July 11, 1870, (16 Stat., p. 230, sec. 1.)	4, 000	4, 000	7, 000	7, 000
Contingent expenses:				
Rent of office for surveyor general, fuel, books, stationery, and other incidental expenses, per act July 11, 1870, (16 Stat., p. 230, sec. 1.)	2, 500	2, 500	2, 500	2, 500
<i>Office of recorder of land titles in Missouri.††††</i>				
Salary:				
Recorder of land titles in Missouri, per act March 2, 1805, (2 Stat., p. 326, sec. 3.)	.....	.....	500	



## NOTES TO THE FOREGOING TABLE.

\* The organic act of this surveying district provides \$2,500 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service, involving restoration of surveying archives destroyed during the late war.

† The organic act of this surveying district provides \$3,500 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

‡ The organic act of this surveying district provides \$6,300 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service consequent on rapid progress of the Northern Pacific and other railroads, calling for more extensive surveying operations in the field and office.

§ The organic act of this surveying district provides \$1,000 for contingent expenses. This amount being inadequate, the present estimate is submitted as absolutely required for the service.

|| The organic act of this surveying district provides \$6,300 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

¶ The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts are inadequate, and the present estimates are submitted as absolutely required for the service.

\*\* The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

†† The organic act of this surveying district provides \$11,000 per annum for clerk hire, and for incidental expenses not exceeding \$10,000. The intricate business under numerous laws of Congress requiring much greater amount of appropriation for clerks in the surveyor general's office than several past appropriations within the maximum of \$11,000 afforded, arrears in the preparation of the descriptive notes of surveys for the local land offices took place to an extent calling for increased appropriation, and to bring up such arrears, accumulated during nine years past, the estimate of \$25,000 is actually necessary.

‡‡ The organic act of this surveying district provides \$1,000 for contingent expenses. The amount being inadequate, the present estimate is submitted as absolutely required for the service.

§§ The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

|||| The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

¶¶ The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

\*\*\* The organic act of this surveying district provides \$6,300 for clerk hire and \$1,000 for contingent expenses. The latter amount being inadequate, the present estimate is submitted as absolutely required for the service.

††† The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts having proved inadequate, the present estimates are submitted as absolutely required for the service.

‡‡‡ The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for contingent expenses. These amounts having proved inadequate, the present estimates are submitted as absolutely required for the service.

§§§ The organic act of this surveying district provides \$4,000 for clerk hire and \$1,000 for incidental expenses. These amounts being inadequate, the present estimates are submitted as absolutely required for the service.

||||| The organic act of this surveying district provides \$1,000 for contingent expenses. This amount being inadequate, the present estimate is submitted as absolutely required for the service.

¶¶¶ No appropriation having been made for the recorder's compensation for the years ending June 30, 1872 and 1873, a deficiency estimate will be submitted for that purpose.

WILLIS DRUMMOND,  
*Commissioner.*

DEPARTMENT OF THE INTERIOR.  
*General Land Office, October 26, 1872.*



No. 16.—*Estimates of appropriations required for the service of the fiscal year ending June 30, 1874, by the General Land Office.*

Detailed objects of expenditure, and explanations.	Estimates by surveyors general.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
SURVEYING THE PUBLIC LANDS.				
In Louisiana :				
1. At rates not exceeding \$19 per lineal mile for township and \$8 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	\$26, 100	.....	\$26, 100	\$18, 000
In Florida :				
2. At rates not exceeding \$10 per lineal mile for standard, \$7 for township, and \$6 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	12, 000	.....	12, 000	18, 000
In Minnesota :				
3. At rates not exceeding \$14 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	50, 000	.....	50, 000	75, 000
In Dakota :				
4. At rates not exceeding \$12 per lineal mile for standard, \$9 for township, and \$8 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	100, 000	.....	80, 000	60, 000
In Montana :				
5. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	101, 000	.....	60, 000	50, 000
In Nebraska :				
6. At rates not exceeding \$12 per lineal mile for standard, \$9 for township, and \$8 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	81, 240	.....	60, 000	60, 000
In Kansas :				
7. At rates not exceeding \$12 per lineal mile for standard, \$9 for township, and \$8 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	69, 880	.....	60, 000	70, 000
In Colorado :				
8. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	117, 750	.....	80, 000	50, 000
In Idaho :				
9. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	57, 510	.....	40, 000	30, 000
In New Mexico :				
10. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	221, 070	.....	30, 000	20, 000
In California :				
11. At rates not exceeding \$15 per lineal mile for standard, \$14 for township, and \$12 for section lines; and for heavily timbered lands lying in the mountains at augmented rates at not exceeding \$18 per lineal mile for standard, \$16 for township, and \$14 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)	.....	.....	90, 000	60, 000
In Oregon :				
12. At rates not exceeding \$15 per lineal mile for standard, \$14 for township, and \$12 for section lines; and for heavily timbered lands lying west of the Cascade Mountains at augmented rates at not exceeding \$18 per lineal mile for standard, \$16 for township, and \$14 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)	100, 830	.....	70, 000	70, 000
In Washington :				
13. At rates not exceeding \$15 per lineal mile for standard, \$14 for township, and \$12 for section lines; and for heavily timbered lands lying west of the Cascade Mountains at augmented rates at not exceeding \$18 per lineal mile for standard, \$16 for township, and \$14 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)	96, 800	.....	70, 000	70, 000
In Utah :				
14. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)	25, 000	.....	25, 000	16, 000
In Nevada :				
15. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)	59, 500	.....	50, 000	50, 000



No. 16.—*Estimates of appropriations required by the General Land Office, &c.*—Continued.

Detailed objects of expenditure, and explanations.	Estimates by surveyors general.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1873.
In Wyoming:				
16. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 358, sec. 1.)			\$60,000	\$40,000
In Arizona:				
17. At rates not exceeding \$15 per lineal mile for standard, \$12 for township, and \$10 for section lines, (appropriated, Laws 1871-'72, p. 357, sec. 1.)	\$30,000		30,000	15,000
(a) For survey of the western boundary of Wyoming at a rate not exceeding \$50 per lineal mile, estimated distance 277 miles, (submitted.)			13,850	
(b) For survey of so much of the south boundary of Colorado Territory as lies between the 25th and 26th meridians west of Washington, at a rate not exceeding \$40 per lineal mile, estimated distance 60 miles, (submitted.)			2,400	
(c) For survey of so much of the eastern boundary of New Mexico as lies between the northwest corner of Texas and the 37th parallel of north latitude, at a rate not exceeding \$40 per lineal mile, estimated distance 35 miles, (submitted.)			1,400	
(d) For survey of the boundary between the Territories of Idaho and Washington, at a rate not exceeding \$60 per lineal mile, estimated distance 180 miles, (submitted.)			10,800	
18. For occasional examinations of the public surveys in the several surveying districts, in order to test the accuracy of the work in the field, (act Mar. 3, 1853, 10 Stats., p. 247, sec. 10.)			10,000	
19. For expenses of survey, appraisement, and other contingent expenses for carrying out the provisions of the act of February 24, 1871, providing for the sale of useless military reservations, (act Feb. 24, 1871, 16 Stats., p. 430.)			20,000	
Total .....			951,550	772,000

## EXPLANATION OF THE FOREGOING ESTIMATES.

1. \$26,100 is estimated for subdivisinal surveys in the southeastern district, east and west of the Mississippi; north of Red River, northwestern and southwestern districts.

2. \$12,000 is estimated for surveying township and section lines in the southern peninsula of Florida.

3. \$50,000 is estimated for surveys of guide meridians, standard parallels, township and section lines situated east and west of the Mississippi, along the routes of several railroads traversing the State where actual settlers are awaiting the surveys.

4. \$80,000 is estimated for the extension of the lines of public surveys in Dakota, between the Red River of the North and the Missouri River, required by settlers along the route of the Northern Pacific Railroad and in the valley of the Red River of the North.

5. \$60,000 is estimated for the extension of public surveys along the Northern Pacific Railroad and in mineral districts, as well as other portions of the Territory where actual settlements have been made and are awaiting subdivisinal surveys.

6. \$60,000 is estimated for the survey of guide meridians, standard parallels, township and subdivisinal lines within the limits of the Union Pacific Railroad, to enable the company to select sections granted and settlers to know the even numbered sections, so as to make improvements thereon without running risk of finding themselves on sections granted to railroad.

7. \$60,000 is estimated for the extension of the lines of public surveys in the western portion of the State of Kansas and in the southwestern angle thereof, and along the several railroad routes and in regions where actual settlements have been made and requiring subdivisinal surveys.

8. \$80,000 is estimated for the survey of public lands lying east and west of the Rocky Mountains, chiefly within the railroad limits; and also in the mineral districts, and in such other localities as require surveyed lands to accommodate actual settlers.

9. \$40,000 is estimated for the survey of public lands required for settlement and for the extension of township and section lines to mineral regions in order to enable miners to locate their claims within specific townships and sections; also to accommodate settlers along the Northern Pacific Railroad.

10. \$30,000 is estimated in view of the construction of the Southern Pacific Railroad through the Territory, and in order to afford facilities to actual settlers along the road to select lands not inuring to the railroad; also to extend the lines of public surveys to agricultural and mineral lands.

11. \$90,000 is estimated for the survey of public lands in the northern part of California; also for the extension of the public lands over finally confirmed claims not requested to be surveyed by grantees within ten months after July 23, 1866, or ten months after final confirmation thereafter made, as provided in the 8th section of "An act to quiet land titles in California," approved July 23, 1866. (Stats., vol. 14, p. 220.)



12. \$70,000 is estimated for the survey of public lands within the limits of the Northern Pacific and Oregon and California Railroads; also along the wagon roads from Eugene City to the eastern boundary of the State, and from Albany in the direction of Canyon City, and in other localities required by actual settlers.

13. \$70,000 is estimated for the extension of the lines of public surveys in the eastern part of the Territory within the limits of the Northern Pacific Railroad grant; also west of the Cascade Mountains where the lands are covered by dense forests and heavy undergrowth, in order to bring them into market and protect the same from spoliation.

14. \$25,000 is estimated for continuing the surveys of public lands along the route of the Union Pacific and Central Pacific Railroads; also for the extension of the lines to mineral regions of the Territory, to enable miners to locate properly their claims by legal subdivisions.

15. \$50,000 is estimated for the survey of public lands adapted for grazing, agricultural, and mineral pursuits, situated in the southern and southwestern portions of the State.

16. \$60,000 is estimated for the extension of the surveys within the limits of the Union Pacific Railroad required to enable the company entitled to odd sections of land and settlers to know the even-numbered sections in order to make improvements thereon; also, for the survey of pastoral and mineral lands in different localities as may be applied for.

17. \$30,000 is estimated for the survey of public lands in the Territory, chiefly in that part of the Colorado River Valley lying between Fort Mojave and the mouth of the Gila River, where choice lands for settlement and timber purposes are found and are already occupied by numerous settlers. It is proposed to survey timbered lands so as to bring the same into an early market, with the view of protecting them from spoliation by settlers and lumbermen.

*a, b, c, d.* These estimates are necessary to separate several jurisdictions of Territories, so that the respective inhabitants may know to which particular Territory their rights of citizenship belong; the boundaries are needed to close the lines of public surveys thereon based upon different bases and meridians; also, to enable the land officers to know that public lands disposed of by them are within their respective districts; and to afford facilities to settlers on surveyed and unsurveyed lands to apply to the proper land officers to file declarations and enter lands.

18. \$10,000 is estimated to cover expenses of examiners to be designated by surveyors general, under the provision of the tenth section of "An act to provide for the survey of public lands," &c., approved March 3, 1853; this sum has become necessary, and is to be apportioned to different districts, according to the exigencies of the service.

19. For the survey of that portion of Fort Bridger, Wyoming, no longer needed for military purposes, 484 square miles, \$10,400. For the survey of Fort Sumner, New Mexico, 21.5 square miles, \$500. For salary of appraisers, contingent expenses, expenses of sale, &c., \$9,100.

WILLIS DRUMMOND,

*Commissioner.*

DEPARTMENT OF THE INTERIOR,

*General Land Office, October 26, 1872.*























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